

Borden, Inc. Annual Report 1977

BORDEN





Financial Highlights

(In thousands except per share and percentage amounts)

	December 31		Percent Change
	1977	1976	
Operating Results (for the year)			
Net sales	\$3,481,278	\$3,381,075	+ 3.0
Income taxes	93,300	91,300	+ 2.2
Net income	126,870	112,807	+ 12.5
Net income per common share and equivalents:			
Primary	4.07	3.64	+ 11.8
Fully diluted	3.89	3.48	+ 11.8
Dividend:			
Common share	1.52	1.35	+ 12.6
Preferred series B share	1.32	1.32	
Total dividends	47,165	41,648	+ 13.2
Capital expenditures	156,179*	134,153	+ 16.4
Financial Position (at year-end)			
Working capital	\$ 524,215	\$ 522,340	+ 0.4
Current ratio	2.2:1	2.2:1	
Shareholders' equity	1,024,989	938,211	+ 9.2
Equity per common share	32.89	30.35	+ 8.4
Common shares outstanding	31,105	30,760	+ 1.1

*See Note 1 to financial statements concerning capital leases.

CONTENTS

Directors and Officers	2-3
Message to Shareholders and Employees	4-5
Borden Foods	7-10
Borden Dairy and Services	11-13
Borden Chemical	15-19
Borden Inc. International	20-23
Corporate Activities	23-24

1977 Financial Review:

Financial Review and Management Analysis	26-28
Five-Year Financial Summary	29
Consolidated Financial Statements	30-34
Notes to Consolidated Financial Statements	35-39
Report of Independent Accountants	39
Corporate Information	40

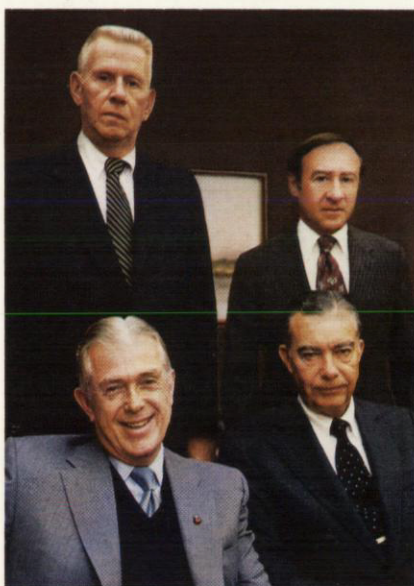
Directors



Clockwise from bottom: Patricia Carry Stewart, Franklin H. Williams, Augustine R. Marusi, Jess N. Dalton.



Clockwise from bottom left: William K. Westwater, W. Thomas Rice, Eugene J. Sullivan, William S. Renchard.



Clockwise from bottom left: Lawrence A. Wien, Walter R. Olmstead, Bernard Nemtzw, James D. Finley.



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The Edna McConnell Clark Foundation
(Charitable foundation)*

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Westwater Company
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Phelps-Stokes Fund
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ROY D. WOOSTER

Former Chairman

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James D. Milligan



Max A. Minnig



John J. O'Connor



Lewis E. Torrance

PRINCIPAL OFFICERS — 1977

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MAX A. MINNIG
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Vice President-Dairy and Services Division

BERNARD NEMTZOW
Senior Vice President

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Vice President-Corporate Development

JOHN B. CARNAHAN
Vice President-Distribution

LAWRENCE O. DOZA
Vice President and General Controller

JOHN V. LYNN
Vice President-Engineering

JOSEPH E. MADIGAN
Vice President and Treasurer

ALLAN L. MILLER
Vice President-Employee Relations

JOHN B. NIMONS
Vice President-Purchasing

ROBERT G. TRITSCH
Secretary



Bernard Nemtzw



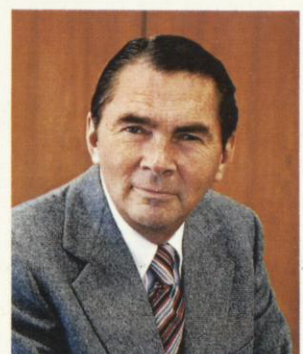
Fred J. Board



John B. Carnahan



Lawrence O. Doza



John V. Lynn



Joseph E. Madigan



Allan L. Miller



John B. Nimons



Robert G. Tritsch

Message to Shareholders and Employees

The Company's 121st year in business was its best year.

Our earnings improved for the eighth consecutive year, increasing 12.5% from 1976 to another all-time high. Our profitability improved as sales rose 3%, also setting a new high. We ended the year on an upward trend; net income in the fourth quarter was above a year earlier, marking the 31st consecutive

year-to-year increase in quarterly earnings. Our investment in new plants and equipment set a record, as did our expenditures for advertising and promotion. The dividend was increased, nine months after the previous increase.

The growth of the Company's business belied the difficult conditions under which it was achieved. Economic recovery

continued, but it was uncertain and uneven. The fear, probably more than the reality, of high inflation prompted consumers to step up their purchases of durable goods in expectation of a further rise in prices, with the result that consumers had relatively fewer dollars to spend on non-durable goods, including food. In anticipation of a healthy recovery, industry expanded its productive capacity faster than the economy could absorb the higher output; there was an overabundance of goods in some areas as a result. Nevertheless, overall costs continued their inexorable rise.

Industry's uncertainty as to the outcome of government action, executive and legislative, was undoubtedly a factor contributing to the economy's hesitant performance. The tax treatment to be accorded capital investments, dividends, and exports; the stringency of environmental regulations; the degree of federal control over energy costs, and the handling of imports all became highly unpredictable elements affecting industrial management's long-range planning.



Augustine R. Marusi, Chairman and Chief Executive Officer (right), and Eugene J. Sullivan, President and Chief Operating Officer.

Within the Company, for example, we are trimming capital investment below earlier projections in part because of uncertainty as to the effect that impending legislation and regulations might have on construction and energy costs. The decline in the value of the dollar abroad has made U.S.-manufactured Borden products more competitive in world markets and encouraged us to develop our export business. But, again, uncertainty as to the tax treatment of exports hampers our long-range planning.

A distinctive characteristic of American business is its resourcefulness: its ability to contend successfully against seemingly insurmountable obstacles. That resourcefulness is being severely tested by the failure of the executive and legislative branches of government to resolve their differences on critical economic issues. Until those differences are resolved, and ground rules laid out, business

cannot take the decisive steps needed to bring about a resurgence of economic growth.

As in recent years, a good part of the improvement we registered in 1977 was the result of the balanced diversity of our operations, which enabled us to seize upon the opportunities that a sluggish worldwide economy provided. The profitability of our domestic chemical business increased because we had the facilities to convert a larger share of our basic raw materials production into higher-margin intermediate and finished goods. Further roll-out of regional food products to new market areas was an important factor enabling some of our food operations to increase overall market share and achieve results close to year-earlier levels, in spite of what was a highly disappointing year for the food industry. Our Dairy and Services Division improved its performance because of its ability to capitalize on major sales trends in specialty dairy products and on opportunities beyond its traditional areas of business. Our International Division, operating under extraordinary conditions ranging from price controls to currency devaluations, enjoyed its most successful year ever, the result of its expansion into new areas of business and its extension into new geographical markets.

Overall as a company, we had the benefit of the Borden name,

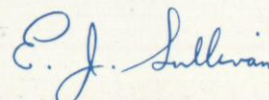
strengthened by a record advertising and promotional effort; of highly efficient manufacturing facilities, added under our record capital investment program of recent years, and of tighter internal controls, including strong finances, that reduced administrative and production costs relative to output.

All these strengths — our Borden franchise, our diversity, our productive capacity, the skills of our employees — will be drawn upon in greater measure in 1978; they are our best assurance that our earnings growth can be sustained.

We wish to express to the men and women of the Borden organization, the members of the Board of Directors, and the shareholders our appreciation for their generous efforts and support during the past year.



Augustine R. Marusi
*Chairman and
Chief Executive Officer*



Eugene J. Sullivan
*President and
Chief Operating Officer*

February 28, 1978



Borden Foods

	1977	1976
Sales (in Millions)	\$1,027.8	\$1,030.9
% of Total Sales	30%	30%
Operating Income (in Millions)	\$ 52.6	\$ 55.4
% of Total Income from Operations	19%	21%

Dollar sales and operating income of Borden Foods declined slightly from a year earlier on unit volume that, overall, was about level with 1976.

Dollar sales increased for most product categories, but the gains were more than offset by the loss of sales resulting from the disposition of marginal or unprofitable product lines, including the Comstock/Greenwood operations, and lower dollar volume in powdered soft drink mixes due to severe competitive conditions.

An industry-wide abundance of cheese, the competitive conditions in soft drink mixes, and a sharp run-up in coffee and cocoa prices combined to prevent overall profit improvement and overshadow the favorable results experienced in most other areas of the Division's business.

For the food industry, 1977 was a difficult year. The leap in the price of coffee and of chocolate-based products distorted the food-price index. Consumers, reallocating their food dollar to accommodate the surge in these two categories, cut back on purchases of many other food products. As a result, tonnage sales of the industry's principal packaged goods were retarded.

The Division's sugar refining operations had an excellent year. Reflecting the downward trend in world prices for raw sugar, selling prices of refined sugar declined from a year earlier and dollar sales were lower. Unit sales rose substantially, however, and the gain, together with stringent inventory control, resulted in a substantial improvement in income.

A factor contributing to the performance of the sugar refining operations is their strong positioning in the more stable consumer segment of the market. Relative to total volume, Borden has a larger share of its business in consumer-size packages than the overall industry.

A multi-million-dollar modernization under way at the Division's Gramercy, La., dry sugar refinery will make the facility one of the most efficient in the industry. Equipment for the automated handling of both raw sugar and finished products has been installed. In 1978, a continuous char kiln will replace a bank of batch kilns. The continuous kiln will effect substantial savings in costs for both bone char, a filtering material, and energy.

Market roll-out

As in 1976, market roll-out was a factor in the performance of several operations. Distribution of Sacra-

mento brand tomato juice and Tomato Plus, a vegetable cocktail, was extended to the Chicago and Baltimore/Washington areas. Bama jams and jellies moved into upstate New York and eastern Pennsylvania; the products, originally available only in the South and Southwest, are now within reach of almost two-thirds of the U.S. population. Further roll-out to other major eastern markets is scheduled for 1978.

The Division's bakery operations began test-marketing in the Midwest a line of frozen snack cakes similar to a line sold fresh in 11 eastern states under the Drake's label. The five items undergoing test are being marketed under the Borden brand. Drake's distribution was also successfully extended to the Florida market.

Market expansion and penetration enabled the bakery operations to lift unit volume by more than 4% and

Recipes developed and tested in the Borden Kitchens and made available in booklet form suggest hundreds of ways to enjoy Borden food products.

Distribution of Sacramento brand tomato juice and Tomato Plus was extended to the Chicago and Baltimore/Washington areas during the year.



dollar volume by twice that amount. The rise in dollar volume in part reflected price increases dictated by the surge in cocoa costs; a substantial part of the snack cake line consists of chocolate-coated and chocolate-flavored items. The higher costs had an adverse effect on margins and income relative to a year earlier.

To accommodate its growing business and at the same time consolidate its operations for greater efficiency, Drake's is undertaking a multi-million dollar expansion of its main bakery, at Wayne, N.J., which was built in 1970. More than 60,000 square feet of space is being added and extensive equipment installed. The facility will absorb bakery operations currently conducted at Irvington, N.J. The project will be completed in the first half of 1978.

Cracker Jack candied popcorn, already one of the most widely distributed food products in the United States, underwent a unique kind of roll-out, reaching thousands of new outlets not normally handled by food brokers. This was done by repositioning the product as an "adult snack," repackaging it in small foil containers, and assigning its distribution to independent distributors of potato chips and other "salt" snacks. These distributors cover service stations, cafeterias, and neighborhood stores, which are patronized mostly by adults.

This new business, together with an improvement in its established business through food chains and amusement parks, resulted in an excellent year for Cracker Jack, with volume solidly ahead of a year earlier. An automated continuous coating line, installed at the Chicago plant in 1976, was a significant factor in meeting the higher demand, and at a greater cost efficiency.

The snack food operations registered an increase in dollar sales from the previous year. Wise Lights, a new, light-colored natural potato chip, was

placed in test in five northeastern markets; Stackables, a new fabricated potato chip, is undergoing test-marketing in Florida and upstate New York.

Wise franchise strengthened

The Wise franchise in potato chips was further strengthened as the result of a successful heavy promotional effort in behalf of Ridgies, a rippled potato chip, which emphasized the product's all-natural qualities.

Wise Nacho cheese flavored and taco flavored tortilla chips were reformulated for zestier taste, and placed in distribution throughout the Wise marketing area. Tortilla chips are by far the fastest growing segment of the corn chip market: about 25% in pounds nationally, and almost twice that rate in the areas in which Wise distributes.

Snow's seafood canning operations, which were adversely affected in 1976 by a severe industry-wide shortage of clams, recovered sharply as the supply situation improved. Dollar and unit sales were well ahead of a year earlier. As a fully integrated processor, with its own fleet of boats, Snow's was able to extend the range of its fishing operations to take advantage of more abundant supplies farther off shore.

Results of the soft drink mix operations were adversely affected by lower unit volume and high promotional costs incurred in the effort to protect market share in the increasingly competitive \$500 million industry. Drink mixes continue as one of the faster growing segments of the total food industry, but this very growth, together with the size of the market, has attracted a number of other companies with resultant proliferation of brands, flavors, packaging and market segmentation.

Cheese sales rise

The Division's cheese sales, in both dollars and units, soared above year-earlier levels. As in 1976, the gain was paced by individually wrapped process cheese slices, the industry's fastest-growing category and one in which Borden has been a leading innovator. Borden Lite-line, a lower-calorie cheese product also sold in singly wrapped slices, registered substantial gains.

The surge in sales reflected the underlying vigor of the cheese industry, which has seen per capita consump-

tion increase by 75% over the past ten years. In 1977, however, margins came under severe pressure, in large part due to a highly unusual upswing in fall milk production and an abnormal impact on cyclical pricing patterns. Historically, the industry maintains relatively stable year-round pricing by building cheese inventories during the "flush" spring and summer milk production season, when raw-milk costs ebb, and drawing down the inventories later in the year when milk supplies drop off. In 1977, however, when milk production remained exceptionally high into late fall, prices did not follow the historical pattern.

The above-average growth rate of the Division's cheese operations, along with their strong market position in value-added processed cheese and the availability of new, highly efficient production facilities, helped to limit the effect that the narrowed margins had on operating income.

The new production facilities are being installed at Van Wert, Ohio, and were in virtually full operation by mid year. They not only double the Division's capacity for individually wrapped process cheese slices but also simplify quality control and reduce production costs.

Packaging for the Division's entire cheese line was redesigned, with greater emphasis on the "Elsie Daisy" trademark in order to capitalize on its strong association with Borden and with quality dairy products.

The Division's grocery products operations had a good year. Eagle Brand condensed milk, the company's original product, and None Such mince meat, on the market almost a hundred years, reported further gains; both products substantially lead the industry in their categories. Kava instant coffee shared the prob-



Phillip Davis, a marketing student at Xavier University and a participant in Borden Foods' pilot minority marketing program, interviews a shopper alongside a display of Borden Breakfast Drink that he set up in a Chicago supermarket.



Unit sales of Cracker Jack candied popcorn improved from a year earlier, aided by a new distribution system that reached thousands of smaller retail outlets.

lems of the coffee industry and experienced a decline in volume. The effect of the drop in coffee consumption was also reflected in sales of Cremora non-dairy creamer, which slipped below previous-year levels for the first time since the product's introduction.

Further progress was made in restructuring the Division's internal operations: establishment of a unified sales organization, consolidation of broker representation for all food products on a market-by-market basis, and unification of distribution activities. Borden Foods Sales, a unit formed late in 1976 to direct the total sales effort, completed its staffing; the unit is responsible for broker

sales, direct sales, national accounts, trade relations, sales promotion, and sales training. At year-end, the Division was represented by 53 brokers in all U.S. markets, down from 168 at the start of the consolidation program. Customers were being served from 63 warehouses, down from 154 at the start of the program, and there was further combination within the facilities of brokered and directly sold grocery products.

Promotion activities at new high

Expenditures for advertising and promotion were at a new high as the Division moved to broaden its franchise



The Borden Wise franchise in snacks was strengthened with additions to the potato chip line and reformulations in the corn chip line.





A wide variety of choice helps account for the growing popularity of the Borden cheese line. Unit and dollar sales increased substantially during the year.

with consumers and the trade. The Division was the major participant in Borden sponsorship of "The Ringling Bros. and Barnum & Bailey Circus" on prime time television in March, and used the program as the focus of a year-long promotional campaign tied to appearances by the circus in major cities throughout the U.S. It was also the major participant in the company's sponsorship of the largest advertisement in the history of newspaper publishing. In November, a 12-page, full-color booklet, titled "Home for the Holidays," appeared as a free standing insert in Sunday newspapers and supplements in the 50 top U.S. markets. A two-page condensation of the booklet, also in color, ran in Sunday newspapers in the next 100 largest markets. Together, the message reached 28 million homes. The booklet featured recipes and menu suggestions for 26 of the Division's products, plus more than a dollar's worth of cents-off coupons.

Borden Foods expects a return to more normal growth rates in 1978, with the improvement coming from product introductions, market roll-out, and greater efficiency. A further fall-off in coffee prices should bring an adjustment in consumers' spending patterns, freeing more of the food dollar for discretionary purchases and benefiting the Division's snack and specialty lines. Abundant grain supplies will serve as a lid on commodity costs, but are also likely to further stimulate milk production and, in turn,

the supply of cheese. Raw sugar supplies should be ample, but at higher cost because of the government's new support program for domestic growers and millers; demand is expected to remain strong. Cocoa-bean prices should descend from their record high levels.

During 1977, food expenditures were restricted because of the high

proportion of disposable income taken up with purchases of durable goods; many of these purchases, particularly for automobiles, were made in anticipation of further inflation. Thus, the degree of consumer confidence that the economy will be moderately stable in 1978 is a significant factor affecting the upcoming performance of the food industry.



Easy to carry, easy to prepare, and available in many flavors, Wyler's drink mixes are ideal for the family picnic.

Borden Dairy and Services



	1977	1976
Sales (in Millions)	\$ 982.8	\$ 970.7
% of Total Sales	28%	29%
Operating Income (in Millions)	\$ 44.4	\$ 44.0
% of Total Income from Operations	16%	17%

Operating income of Borden Dairy and Services Division improved from a year earlier, despite a resumption of the downward trend in the market demand for milk and ice cream. Record results by the Division's specialty operations and increased sales of yogurt, fruit drinks and ice cream novelties were the major factors contributing to the higher earnings. The gain in sales reflected generally higher selling prices on moderately lower overall volume.

The decline in per capita consumption of milk and ice cream products in 1977 obscured the steady

growth that has been registered by specialty items, notably low-fat milks and yogurt. Yogurt is now the fastest-growing product in the food industry, its growth spurred by wider consumer awareness of its nutritional qualities and its availability in an increasing range of styles, types, flavors, and package sizes, together with a changeover to all-natural ingredients.

In 1977, the Division outpaced the industry in rate of growth in yogurt sales, on the strength of new product introductions and a major expansion of distribution. Borden all-natural yogurt with fruit on the bottom was rolled out to all the Division's markets following a highly successful test in Florida. It is a companion product to Lite-line Swiss style yogurt, with fruit mixed throughout, which enjoyed a record sales year following its reformulation to all-natural flavoring and extension of its distribution to additional marketing areas. Frozen yogurt was added to the product line and placed on sale in all markets where Borden ice cream is available. It is being offered initially in pints, 4-oz. cups, and in 3-oz. "push-ups" as a frozen novelty. Additional frozen yogurt novelty items are scheduled for introduction early in 1978.

Yogurt facilities expanding

To accommodate the rapidly growing demand for yogurt and other cultured dairy products, the Division has undertaken a major expansion of its manufacturing facilities. In November,



Lite-line frozen yogurt was introduced in all ice cream markets during the year, joining Lite-line Swiss style yogurt with fruit on the bottom and new Borden yogurt with fruit mixed throughout.



The Borden Ice Cream Parlor is a popular attraction in the Magic Kingdom of Walt Disney World at Orlando, Fla. Borden is the official supplier of milk and dairy products to Walt Disney World.

it purchased a building at Sulphur Springs, Tex., that is being converted to the manufacture of Swiss-style and fruit-on-the-bottom yogurts, cottage cheese, sour cream, and sour cream dips. Upon completion in the second quarter of 1978, the facility will serve Borden markets in Texas, Oklahoma, Arkansas, and part of Louisiana.

The Division in 1978 will also add a cultured dairy products plant in the Midwest, to serve Ohio, Michigan, Indiana, West Virginia, and western Pennsylvania. The plant will manufacture several types of aseptic dairy

products in addition to yogurt, sour cream, and cottage cheese. It will incorporate the latest technology to take advantage of energy conservation measures and to prevent water pollution. Acid-whey solids resulting from the manufacturing process will be recovered and converted into food-grade nutrients.

The Division increased its dollar sales of ice cream behind an exceptionally strong performance by novelty items and extensive market roll-out of all-natural Borden Old Fashioned and Lady Borden premium ice creams.

The gains in novelty items reflected the availability of a much broader product line in most markets. Distribution of Cracker Jack ice cream bars

was extended to all Northern markets and several Sunbelt markets following successful sales results in the Midwest. The product as well as its packaging carries over all the features of the famous Borden confection, including a "toy surprise" inside each box of six bars, and Sailor Jack and his dog Bingo displayed on the carton.

New novelties introduced

Among other novelty items introduced during the year were Dutch Chocolate ice cream sandwiches and Root Beer Float ice cream bars. Early in 1978, the Division introduced Borden Candy Store ice cream in three flavors: mint chocolate chip,

peanut brittle, and peppermint stick.

During the year, packaging for Lite-line yogurt, cottage cheese, sour cream, and sour cream dips was completely redesigned, with cleaner lines and greater prominence given to the distinctive Elsie Daisy symbol. Package redesign of several other product groups is scheduled during 1978, and all new products will follow the new design standards in their packaging.

A number of capital projects to improve the production and profit-making capabilities of the dairy operations were carried out during the year. Manufacturing facilities for yogurt were added at Milwaukee, Wisc., and expanded at Columbus, Ohio. Ice cream production capacity was expanded at Greenville, S.C., and ice cream storage enlarged at St. Louis, Mo., and Marshall, Tex. New distribution facilities were constructed for ice cream at Garland, Tex., and for milk and ice cream at Williamson, W. Va. Milk vault and dry storage facilities were enlarged at Lexington, Ky., and Youngstown, Ohio; a new milk distribution branch is also under construction at Youngstown. New cottage cheese packaging equipment was installed at Watertown, N.Y., and equipment for the blow-molding of plastic milk bottles was added at Lafayette, La., and Jackson, Miss.

Specialty operations set record

The Division's specialty operations enjoyed another year of record results. The soft drink bottling operations achieved further penetration within their 12-county marketing area surrounding Indianapolis, Ind., which

helped push sales and income to new highs. The bottled water operations outperformed the industry in market growth, aided by extended use of a new, five-gallon plastic bottle (manufactured by Borden Chemical) and entry into the industrial distilled-water market, in Southern Florida. Equipment for the processing of distilled water (as distinct from purified water) was installed at the Miami plant.

The industrial foods operations had an excellent year, marked by deeper penetration of established markets and entry into several highly promising new areas of business. The industrial food unit specializes in the manufacture of dry ingredients that are sold to other food processors. The ingredients are used to flavor products or enhance their functional qualities. Among the principal customers are manufacturers of soft drink mixes, pizza mixes, powdered sauces, yogurt, snack foods (for coatings), baked goods (for protein fortification), and chewing gum (for flavorings).

During the year, the industrial foods unit doubled its manufacturing capacity for yogurt fruit-flavor bases, at Brooklyn, N.Y., and for citrus powders, at Corona, Calif. The Corona expansion project included the installation of facilities for the encapsula-



Among the ingredients supplied to food manufacturers by the Division's industrial foods operations are powdered cheese and tomato powder to processors of pizza mixes and frozen pizzas.

tion of volatile citrus flavors. In the encapsulation process, microscopic particles of citrus powder are encased in a soluble coating that locks in the highly volatile oils. Encapsulated flavors have wide potential applications in the pharmaceutical and oleoresin industries, as well as the food industry.

In another major capital project on behalf of industrial foods operations, work is nearing completion on facilities at Watertown, N.Y., for the recovery of food elements for human use from acid whey that is produced in the manufacture of cottage cheese. The project will go into operation in the first quarter of 1978. Acid whey, although high in nutrients, has until now been of little commercial value. In most plants, it must be either pretreated before disposal in sanitary systems, or hauled away.

The whey nutrients recovered at Watertown, where cottage cheese and other cultured products are manufactured, will be marketed to food processors by the Division's industrial foods unit.



Good, and wholesome: Lady Borden ice cream is made with all-natural ingredients and flavors; Cracker Jack ice cream bars have all the features of the famous Borden confection—plus chocolate-coated ice cream.



Borden Chemical

	1977	1976
Sales (in Millions)	\$ 876.2	\$ 833.6
% of Total Sales	25%	25%
Operating Income (in Millions)	\$ 118.2	\$ 108.1
% of Total Income from Operations	43%	42%

Borden Chemical, drawing upon the diversity of its operations, outperformed the chemical industry generally to set new highs in sales and operating income. The improvement from a year earlier—5.1% in sales and 9.4% in operating income—was primarily the result of substantially higher volume, which more than offset lower prices in some major product groups, and the benefit of new facilities that came on stream during the year.

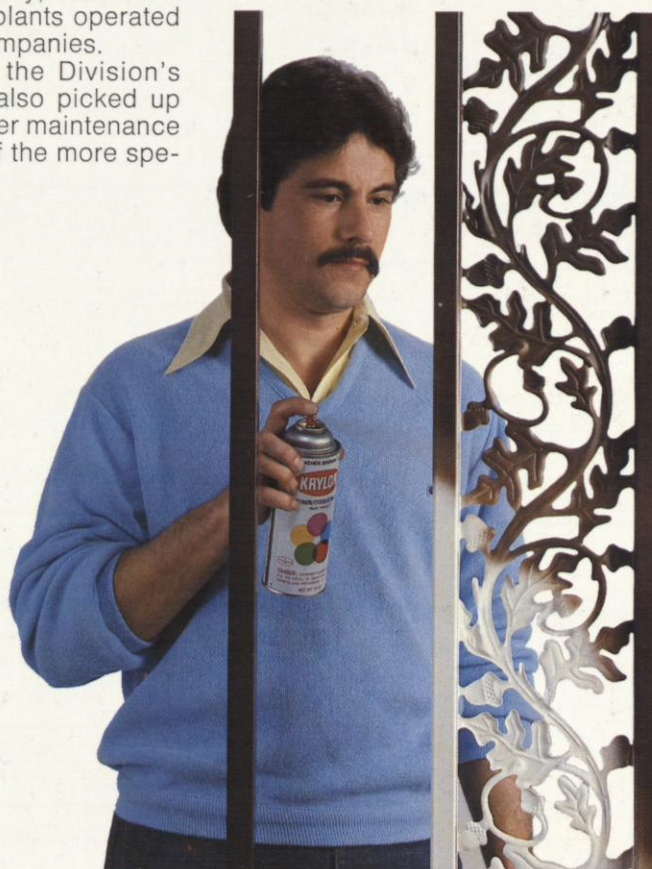
As in 1976, strong demand for housing was an important factor in the Division's performance. Housing starts surged 30% above a year earlier to almost two million units, sharply boosting Borden Chemical's volume sales of thermosetting and thermoplastic resins, two of its principal industrial products. The Division is the leading supplier of thermosetting resin adhesives to the plywood and particleboard industries, and a major supplier of thermoplastic (principally PVC) resins and materials, widely used by the housing industry in the form of vinyl flooring, siding, pipe, and wallcoverings.

With an annual capacity of over 1.5 billion pounds of formaldehyde, including 250 million pounds added in the fourth quarter of 1976, the Division

had no problem meeting the demand for resin adhesives made from formaldehyde. But being hydrocarbon-based, the resins were under severe cost pressures. Several attempts were made to increase prices, but were unsuccessful because the total demand was absorbed by greater industry capacity, much of it coming from captive plants operated by forest-products companies.

Other markets for the Division's thermosetting resins also picked up strongly, and with better maintenance of margins because of the more spe-

cialized nature of the products provided. These markets included glues for high-quality furniture, resins for abrasives, and industrial dry phenolic resins. Volume sales were at an all-time high, with the supply position in glues aided by the opening by mid



Decorating filigree is a job for Krylon. Krylon spray paints are available in a wide variety of colors, dry fast, and contain no fluorocarbons that could be harmful to the ozone.

Elmer's School Glue is just one of some three dozen chemical consumer products marketed under the Elmer's trade name.



Borden Chemical is an important producer of animal feed supplements. The phosphates are supplied from a Borden-owned phosphate mine in Florida.



year of a 6.5-million-pound hot-melt adhesives plant at Louisville, Ky., to serve the major Southern furniture industry.

To meet the growing demand for industrial dry phenolic resins, the Division is expanding its resin capacity at Bainbridge, N.Y., by 10 million pounds per year, and is building a new dry phenolic resin plant at Louisville, with a capacity of 32 million pounds per year. Both projects are scheduled for completion during the first quarter of 1978.

Louisville is also the site of a newly opened sales development laboratory, which will serve the Division's eastern adhesives and resins operations.

Another fast-growing outlet for the Division's formaldehyde capacity is the insulation market, which is being spurred by the shortage and rising cost of energy. Borden Chemical

markets a patented foamed-in-place insulating material, Insulspray, that is made by combining a urea-formaldehyde resin with a catalyst. It is pumped at the consistency of shaving cream into exterior wall cavities, where it hardens into a rigid, highly cellular mass.

Because the insulating characteristics of foamed-in-place insulation are affected by the quality of the installation, the Division has developed and assists in conducting an intensive training program among independent contractors who perform the work. A fleet of vans staffed by Borden specialists and equipped with training materials is being used to call on the contractors and provide instruction on installation according to Borden specifications. The Division also monitors advertising claims by contractors to assure conformance with the known insulating and other qualities of the material.

For thermoplastics, chiefly PVC, the total market grew at a moderate rate. However, there was a further shift in product mix from specialty to commodity-type applications, with a

consequent erosion of overall prices and margins. Borden Chemical had the benefit of adequate PVC capacity and the new availability of a substantial captive source of vinyl chloride monomer (VCM), the raw material from which PVC is made. Thus it was able not only to adapt to the shift in market demand but also to improve the results of its thermoplastics business.

PVC dollar sales rise

The most pronounced rise in volume was in PVC resins going into pipe and siding, reflecting the boom in housing starts. While PVC for these outlets carries lower selling prices than PVC sold to the more traditional markets, it also represents a relatively new area of business for the Division. The tonnage gains for the 1977 product mix were so substantial that dollar volume improved even though overall price levels were lower.

Resinite PVC packaging film held its position as the leading brand of transparent film for the in-store wrap-

ping of meats and produce, in spite of heightened price competition. The Division's total market for PVC film continued to expand rapidly, however, with the broader acceptance of its recently developed Resinite for the stretch-wrapping of palletized products. Resinite Pallet Wrap does away with the need for taping, strapping, or heat sealing, and is less costly and energy-saving. It has been enthusiastically received by warehouse-operators and shippers.

Production capacity for Resinite was increased almost 20% with the completion, toward year end, of an expansion of the Griffin, Ga., facility, one of four Resinite plants operated by the Division.

The coated fabric operations increased their share of the wallcovering market through an aggressive promotion campaign, the lasting effect of which was evidenced by the high rate of restocking by outlets following its completion.

Industrial vinyl market gains

There was a pronounced pickup, in the second half, in the volume of vinyl material directed to the industrial market, which helped offset a softening in the automotive market. Domestic automotive production showed a healthy increase from a year earlier, but the percentage of automobiles equipped with vinyl seats and roofs declined. Overall, output by the coated fabric operations was up substantially, with production in November the highest for any month on record.

The Division's other vinyl operations, which produce materials for such items as luggage and furniture, experienced lower results on level volume, but nonetheless outperformed the industry. The industry has been increasingly affected by the inroads into the market of domestic non-vinyl materials and imported vinyl. The efficiency and cost-competitiveness of the Borden operations were heightened during the year with the installation of laminating and printing equipment and the addition of warehouse space at Haverhill, Mass. The equipment provides a 30% improvement in the volume of laminated and printed calendered vinyl processed through the plant.



Specialty inks for printing on foil packaging materials (right) are produced by Borden Chemical. This Borden Annual Report is printed with Borden inks.



The company has an active gas/oil exploration program under way in Louisiana to develop an assured future source of natural gas, primarily for the petrochemical complex at Geismar, La.



The housing boom, along with home remodeling, was an important factor contributing to the upswing in volume sales of Borden PVC resins. Vinyl siding is among the many uses for the resins.

Benefiting the Division's PVC operations, from the standpoints of both cost and supply, was the availability throughout the year of a significant in-house source of vinyl chloride monomer (VCM). In January, a new VCM plant went on stream at the Division's petrochemical complex at Geismar, La. It has a "nameplate" capacity of slightly more than 300 million pounds per year, but was running above that capacity before year end.

VCM, during the polymerization process, is converted into PVC on virtually a pound-for-pound basis; consequently, the new VCM plant accounts for more than half the raw-material supply for the Division's annual capacity of some 550 million pounds of PVC resins.

The VCM plant is part of the Division's petrochemical operations, and was a significant factor contributing to their favorable performance. The Geismar complex produces, in addition to VCM, such basic chemicals as methanol, ammonia, urea, formaldehyde, acetic acid, and vinyl acetate

monomer. These are supplied to other Borden Chemical facilities for conversion, as well as sold to industrial customers.

Margins on the basic chemicals were under pressure during the year, the pressure in some instances coming from rising costs for underlying raw materials (as with ethylene for VCM), and in others coming from softer prices for end products (as with resin adhesives made from methanol). Tight inventory controls, capacity production across the full range of products, and the high efficiency of the new VCM plant enabled the Borden petrochemical operations to turn in record results.

The new Gas Resources Department, formed in late 1976, had a successful first year. The department is responsible for managing all natural gas reserves currently owned, leased, or under contract to the company; for developing additional reserves, and for negotiating new supply contracts.

Active gas/oil program

The company has an active gas/oil exploration program under way, to which more than \$20 million has been

committed over the next several years. The program, a mix of Borden-initiated and joint-venture projects, is limited to Louisiana, principally because of the state's proved reserves and the relative proximity of drilling operations to by far the company's largest user of natural gas, the Geismar petrochemical complex.

The company has no immediate need for additional gas; the program is designed to develop an assured source several years hence.

The Division's shipments of fertilizer, spurred by lower selling prices, rose to the highest level on record and the gain in volume pushed dollar sales to a new high. Tonnage and dollar sales eased somewhat toward year end as farmers, concerned about declining crop prices, reduced or possibly deferred fertilizer purchases. Operating income of the fertilizer operations was down slightly due to rising raw material and energy costs and the lower selling prices.

New phosphate reserves tapped

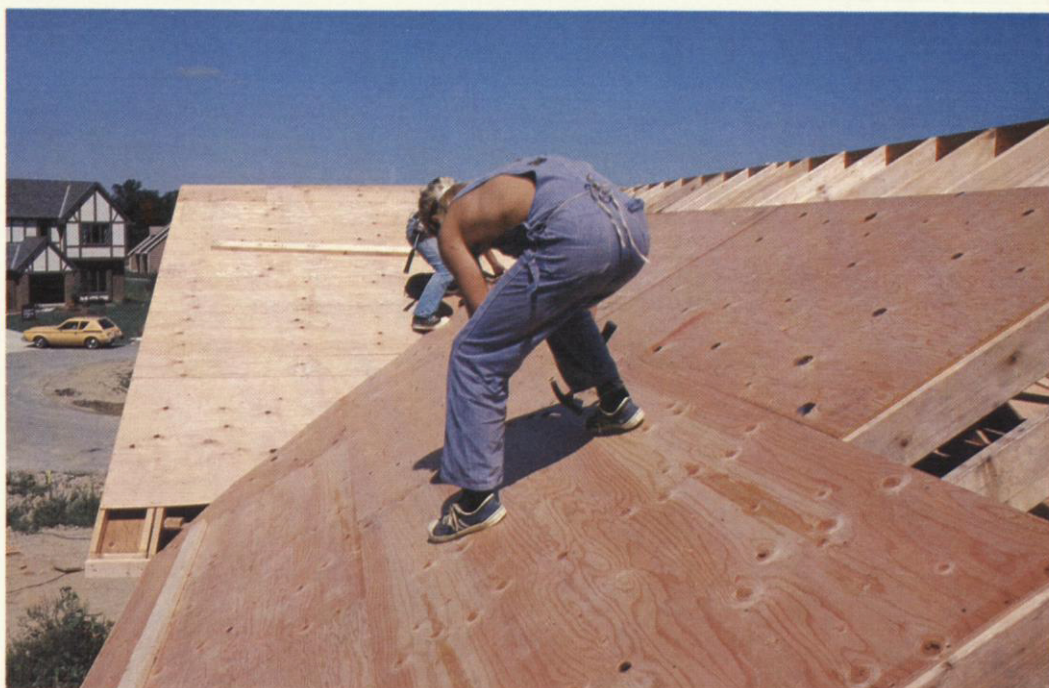
A factor contributing to the lower earnings was the near depletion of the Division's phosphate mine at Tenoroc, Fla., which reduced the cost efficiency of this sector of the agricultural operations. In January, 1978, however, rich new reserves of phosphate rock became available with the opening of a new mine at Big Four, near Tampa, Fla. The project includes a beneficiating plant for the separation of phosphate, with a capacity of 1.2 million tons of rock per year. Big Four will supply the Division's needs of phosphate for fertilizer and animal-feed supplements in the foreseeable future.

Printing ink operations outperformed the industry and improved on their results of a year earlier. The gain was due primarily to greater emphasis on gravure and publication inks for commercial printers, and to substantially higher volume in pigments. The pigment operations ran seven days a week throughout much of the year.

Chemical consumer products enjoyed another outstanding year, again led by the Elmer's line of home-improvement products and the Sterling line of school and office supplies, and reinforced by much-improved results for Krylon spray paints and Mystik tapes. The performance reflected the outstanding acceptance accorded the score of new consumer products introduced over the past three years, notably the "Professional Carpenter's" group of Elmer's products and the "Desk Mate" group of Sterling office supplies.



The Division is using a fleet of vans staffed by specialists and equipped with training materials to instruct independent contractors on the proper installation of Insulspray foamed-in-place insulating material.



Borden Chemical is the leading supplier of thermosetting resin adhesives to the plywood industry. Strong demand for housing sharply boosted shipments of the Borden adhesives.

Expansion of the line continued in 1977 with the addition of all-purpose caulk and tub caulk in 6-oz. tubes under the Elmer's brand, and Krylon Ten*4, a spray lubricant and protective coating directed to the \$50 million industrial market. Early in 1978, a non-flammable solvent contact cement under the Elmer's brand was introduced in pint, quart, gallon, and five-gallon sizes.

Distribution of the Elmer's and Krylon lines substantially broadened during the year as a result of their availability in a significantly larger number of stores operated by major general merchandising chains. Another leading chain approved the sale in its stores of the Elmer's line, the initial order covered 17 items.

Results for the Alex Colman line of women's sportswear and dresses declined from the record levels of a year earlier. Alex Colman's positioning in synthetic-fiber casual wear was affected by a sudden shift in consumer preference toward natural-fiber clothing. Accommodating this shift resulted in inventory adjustments and higher costs for materials and tailoring. With

the changeover well under way, an improvement in results is foreseen for 1978.

* * *

Borden Chemical anticipates further growth in 1978. Several important markets—industrial dry phenolics, building insulation, and industrial film wrap—show above-average growth prospects, and the Division has the increased production capabilities to serve them. The new Big Four phosphate mine will substantially improve the cost-efficiency of the agricultural operations, and help offset expected lower demand and prices for fertilizer.

Housing starts are projected to hold near the 2-million mark, providing a strong base for the Division's thermosetting and thermoplastic resins business. Total PVC demand should increase moderately, with a further shift toward high-volume markets. The Division expects to increase its share of these markets by capitalizing on the cost efficiencies provided by the new VCM plant and its position as a leading converter and supplier of PVC resins.

Margins on the basic chemicals in which the Division is represented—methanol, urea, ammonia, and vinyl acetate and vinyl chloride monomers—are likely to undergo a further cost squeeze. However, increased demand should more than offset narrower margins, and result in a moderately better overall performance.



Manufacturers of premium luggage are among the customers for Borden vinyl materials.

Borden Inc. International

	1977	1976
Sales (in Millions)	\$ 594.5	\$ 545.9
% of Total Sales	17%	16%
Operating Income (in Millions)	\$ 61.0	\$ 53.1
% of Total Income from Operations	22%	20%

In its tenth year as a separate operating division of the company, Borden Inc. International continued its uninterrupted growth in earnings. Operating income rose 15.0% from a year earlier to another all-time high and sales improved by 8.9%. The performance was achieved in the face of numerous obstacles: a world economy troubled by increasing inflation,

high energy costs, balance of payments problems, uneven economic growth, and currency fluctuations. Further limiting free-market opportunities were price controls in effect in several countries.

All areas of the Division contributed to the growth with the exception of export, which was affected by lower petrochemical and fertilizer prices and the increased demand for these products in the United States.

EUROPE

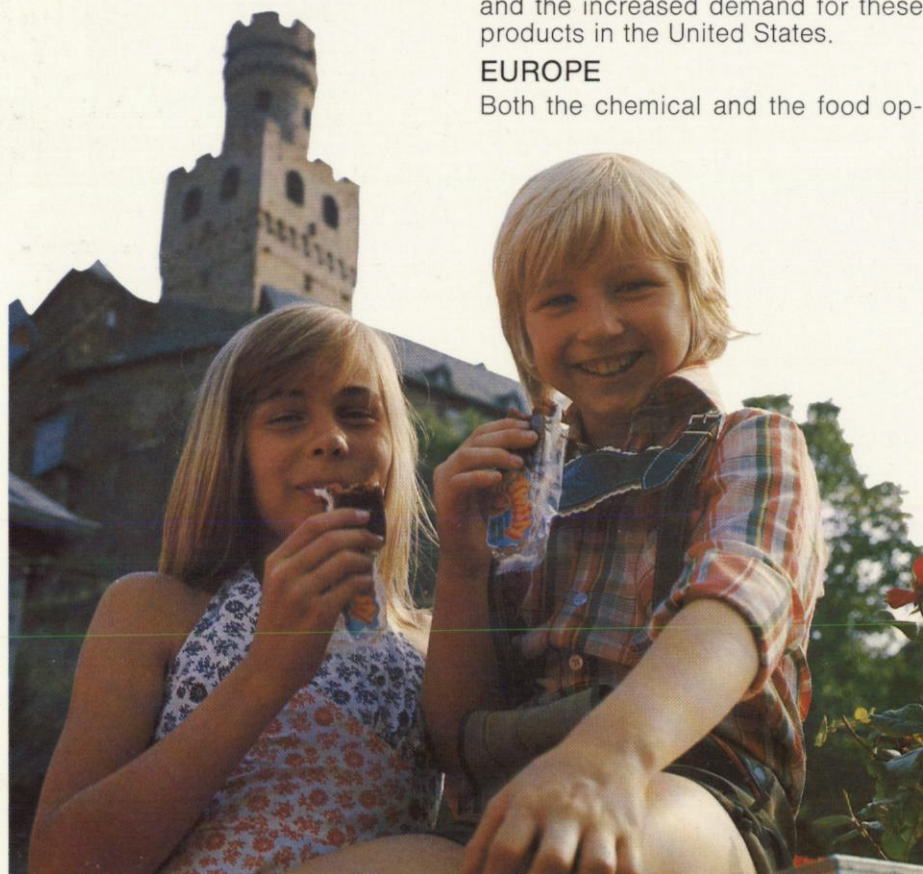
Both the chemical and the food op-

erations in Europe attained record results. Market participation was maintained or increased in almost every category in which Borden is represented.

In chemicals, the tape-manufacturing affiliate in France and the diversified affiliate in England each set new highs with the help of sharp gains in consumer-products business. The Humbrol and Britfix brands of hobby kits, paints, and adhesives, marketed in the United Kingdom, enjoyed an exceptional year. The British industrial chemical operations also registered a substantial improvement.

The European food operations were led by outstanding performances by the bakery in Germany and the general-line food company in Spain. In Germany, a reorganization, begun in 1976, became fully effective and brought about manufacturing efficiencies, product improvements, and intensified marketing activities that contributed significantly to the record results achieved. The Spanish food company had a highly successful year, in spite of the country's political and economic difficulties and general labor unrest. Several new products were introduced and manufacturing operations were streamlined. Construction began on a new processing plant at Segovia, in central Spain, which will complement existing facilities at three locations near Barcelona.

The Danish food operations had a good year, although the Cocio unit was affected by the rapid acceleration of cocoa costs. Cocio is the largest selling brand of bottled, all-natural chocolate milk in Denmark, and its sales and market share reached new highs during the year. The Danish cheese operation achieved satisfac-



Twisty snack cakes were introduced by the Borden bakery affiliate in West Germany.



Top: A Saudi Arabian youngster enjoys a glass of milk made from Instant KLIM whole milk powder. Center: Native artisans use locally produced Borden adhesives in their outdoor workshop in Quito, Ecuador. Bottom: A bull fight in Spain becomes a marketplace for Crecs, an extruded corn snack made by the Borden Spanish food affiliate.

Lady Borden, the leading brand of premium ice cream in Japan, set an all-time high in sales; Borden Cheez Kisses were placed in national distribution following their introduction to the Japanese market in 1976.

tory results, in part due to a complete reorganization that was undertaken in preparation for an expansion program in 1978.

Whole milk powder operations in Denmark and Ireland enjoyed their best year ever, as sales of KLIM brand whole milk powder in worldwide markets set new records. Instant KLIM, introduced in 1973, experienced exceptional growth.

CANADA

Borden Canada improved its performance and market position in spite of an economic environment disrupted by wage and price controls,

severe unemployment, political unrest, and devaluation of the Canadian dollar.

The chemical operation completed the consolidation of operations in the Western provinces and expansion of its formaldehyde plant at Vancouver, B.C. Sales of Insulspray insulating material increased substantially for both residential and industrial use. The product was used in the construction of a major high-rise office and retail center in downtown Toronto. The government's assistance program for insulating homes is expected to have a favorable impact on future sales of Insulspray.

Sales of Pallet Wrap Resinite film increased, and an expansion of man-

ufacturing facilities is under way. The market position and profit performance of Elmer's glues and Krylon spray paints improved during the year, in spite of extremely depressed market conditions for these categories of products.

The dairy operation was successful in its Canadian launch of soft frozen yogurt; early results indicate good growth potential. Several Borden retail ice cream parlors are also selling the product.

There was an increase in the Borden share of the yogurt and ice cream markets in Canada. The increase, to-



A British youngster readies a test flight of model airplanes assembled from Humbrol hobby kits produced by the Borden chemical affiliate in England.

gether with a concentrated cost-saving program in all areas, enabled the dairy operation to improve its performance, although profit gains were limited by unfavorable rulings of the Anti-Inflation Board.

The foods operation achieved substantially higher results. Wyler's drink mixes were successfully introduced in the spring, with the support of extensive billboard and television advertising and product sampling to almost three million homes. A major promotion of ReaLemon reconstituted lemon juice helped to improve market share for the product. To meet increasing demand for ReaLemon, a new high speed bottling line was installed at Ingersoll, Ont. Eagle Brand sweetened condensed milk benefited from strong television advertising support and household delivery of an Eagle Brand recipe book.

LATIN AMERICA

Operating income of Latin American operations increased for the sixth consecutive year. The significant improvement from 1976 was primarily the result of a more favorable product mix and greater manufacturing efficiencies.

The food operations continued to perform well.

- In Brazil, tonnage sales of the pasta company set new records. Distribu-

tion was extended; facilities were acquired for the production of a complete new product line consisting of refrigerated fresh dough pasta specialties and pizza.

- In Mexico, the dairy company introduced yogurt and several new varieties of cheese. Fluid milk processing was consolidated in a centrally located plant.

- In Puerto Rico, the opening of new warehouse facilities brought reductions in the costs of sales and distribution and made possible a consolidation of sales efforts that resulted in a substantial increase in shipments of KLIM powdered whole milk.

- In Panama, the transformation of the Borden affiliate from solely a sales company to a manufacturing company progressed with the opening of separate production facilities for ice cream and KLIM. In 1976, the company entered the food processing field with a packaging operation for Cremora non-dairy creamer and a varied group of Borden-brand dairy and citrus drink mixes.

The Latin American chemical operations felt the effect of construction slowdowns, since an important outlet for their products is the wood industry. The slowdown was most pronounced in Mexico, where the devaluation of the peso in late 1976 continued to create economic uncertainties.

In Brazil, the chemical company strengthened its position as a major supplier to industry at the same time that it increased sales of consumer products. To reduce distribution costs and improve customer service, it has developed a program of installing smaller, self-contained production units closer to industrial markets. The

first unit under the program, a formaldehyde plant, went into operation at Vitoria; a second, at Manaus, is in the design stage.

Chemical operations in Argentina and Uruguay showed improvement, although continuing to operate under difficult economic conditions. In Central America, the Borden complex is adding manufacturing facilities for formaldehyde, the basic raw material for plywood and hardboard adhesives, as the area begins to expand the utilization of its abundant wood resources. In Ecuador, Borden opened its first manufacturing facility in the country: a formaldehyde plant at Quito.

ASIA

The Asian chemical and food operations enjoyed further growth during the year.

Borden Australia improved its share of the domestic market for industrial resins, and began export operations to The Territory of Papua and New Guinea. It began construction of its third chemical facility in the country, a formaldehyde and resins complex at Brisbane. Plants are currently operated at Sydney and Melbourne.

Chemical sales of the Borden plant at Penang, Malaysia, grew substantially, aided by exports to Indonesia and Thailand. A bulk terminal was established at Butterworth.

The Philippine chemical operations achieved record results, as a sharp rise in productivity and reduced energy costs per unit of output helped to offset a somewhat adverse business environment. An expansion of facilities is under way.

In Japan, Hitachi-Borden, a joint venture for the manufacture of Resinite PVC film, installed additional



Borden Cocio is the largest selling brand of bottled, all-natural chocolate milk in Denmark.

manufacturing facilities. The plant has been operating at full capacity almost since its opening three years ago.

Lady Borden ice cream, the leading brand of premium ice cream in Japan, established another all-time high in sales. It is manufactured under license by Meiji Milk Products Co., Ltd., a leading Japanese dairy. Meiji-Borden, the joint-venture cheese company, placed Borden Cheez Kisses in national distribution following their introduction in 1976. Manufacturing facilities for this snack cheese will be doubled early in 1978. To accommodate growing demand for the Borden cheese line, refrigerated storage capacity has also been increased.

CAN MACHINERY

The Can Machinery operation, headquartered at Randolph, N.Y., reached a milestone during the year with the installation and startup of the first "all-Borden" can-making plant. The operation has installed more than a score of "turn-key" can-making lines over the past decade, but this is the first in which all the pieces of machinery were of Borden manufacture.

Among other developments was the introduction of equipment for the high speed joining of light gauge metals, using a laser-like unit. Ragsdale Bros. Inc., a leading manufacturer of machinery to produce seamless, two-piece cans, was acquired in February, 1978.

EXPORT

Sales of U.S.-made Borden brand products reached historic highs in world markets during the year. Within the foods group, new marketing techniques and more aggressive sales activity have made many familiar Borden products market leaders in the Caribbean, Central and South America, Europe, and the Middle East.

Results of consumer chemical exports were also excellent. New markets were opened for the Elmer's line in Hong Kong and for the wallcoverings line throughout Southeast Asia, where new buildings are going up at an accelerated rate.

Although volume shipments of petrochemicals and fertilizers were at projected levels, lower market prices affected income. The bulk export operations, however, serve as a balance wheel for Borden, taking up production in excess of domestic demand and enabling the domestic plants to operate efficiently at full capacity.

Borden Corporate Activities

CHANGES IN DIRECTORS AND OFFICERS

Jess N. Dalton, senior partner in the law firm of Goodrich, Dalton, Little & Riquelme, Mexico City, Mexico, was elected a director at the annual meeting in April. He succeeded Courtney C. Brown, dean emeritus of the Graduate School of Business of Columbia University and a Borden director since 1965. Dr. Brown was not a nominee for reelection, in accordance with the policy of not standing for election after attaining age 72.

Franklin H. Williams, president of the Phelps-Stokes Fund and former United States Ambassador to Ghana, was elected a director in July. His election increased the board to 12 members.

Lewis E. Torrance was appointed president of the Borden Dairy and Services Division and elected a corporate vice president, effective June 1. He succeeded Raymond T. Pryor, who retired after 30 years of service with the company.

Three management changes were effected in July. Lawrence O. Doza, general controller since 1974, was elected to the additional position of corporate vice president. Allan L. Miller was elected vice president-employee relations, succeeding Fred J. Board, who was named vice president-corporate development, responsible for the acquisition activities of the company worldwide.

John B. Carnahan, vice president-distribution, was named vice president-purchasing and distribution, effective Jan. 1, 1978. John B. Nimons relinquished his responsibility for purchasing on that date, but will continue as a vice president until his retirement on July 1, 1978, when he will complete 45 years of service with the company.

Marvin J. Herb was appointed president of the Borden Dairy and Services Division and elected a corporate vice president, effective Jan. 1, 1978. He succeeds Mr. Torrance, who will continue as a corporate vice president until June 1, 1978, when he will retire after completing more than 45 years of service.



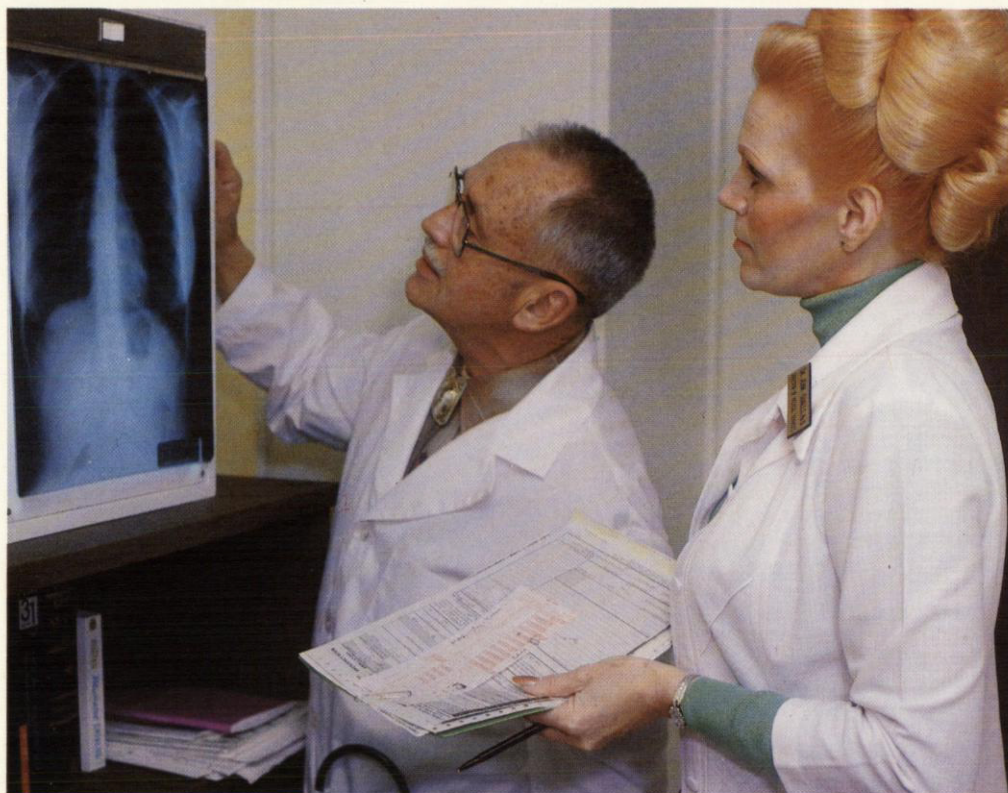
Technician Rhonda Walkup, using a Kjeldahl unit, analyzes a Borden food product for protein content at the corporate Quality Assurance Laboratory, Columbus, Ohio.

ENERGY TASK FORCE

Coping with the energy demands of the severe winter of early 1977 and assessing the impact on company operations of proposed energy legislation occupied most of the Energy Task Force's attention during the year.

Conservation and preparation paid off for Borden in areas hard hit by extended sub-zero temperatures and fuel curtailments. The earlier conversion of plants to alternate fuel capability and the securing of adequate supplies kept disruptions to a minimum.

Despite the creation of a cabinet-level federal Department of Energy, which absorbed the Federal Energy Administration, no comprehensive legislation resulted. There was no change in the long-term federal goals for energy conservation by industry; Borden continued on target toward these goals, which call for roughly 15% in energy savings by 1980 over 1972 consumption.



Joan Qualls, R.N., Ph.D., director of medical services for Borden Sacramento Foods, examines an X-ray with Dr. Edward Dart, chief physician at the Industrial Clinic of Community Hospital in Sacramento, Calif. Dr. Qualls proposed the clinic and served as industry consultant in its planning, building, and staffing. It provides emergency and follow-up care for on-the-job accidents to employees of all companies in the highly industrialized North Sacramento area where Sacramento Foods is located.

Having adopted over the past five years all the practical non-capitalized means of effecting energy-cost savings, the company turned increasingly to engineering projects to bring about further reductions. Two projects completed late in the year at Borden Chemical's petrochemical complex at Geismar, La., will recover almost 500 million cubic feet of carbon monoxide gas and almost 2.5 million gallons of dimethylether, respectively. Substantial energy savings will result from capital projects being undertaken at Borden Foods' Gramercy, La., sugar refinery, and the clam shucking plant of Snow's at Point Pleasant, N.J.

SOCIAL RESPONSIBILITY

The company stepped up its efforts to improve opportunities for racial minorities, women, and the handicapped to participate more fully in the business community.

In spite of a decline in the company's domestic work force, due to the disposition of some operations, both the number and the percentage

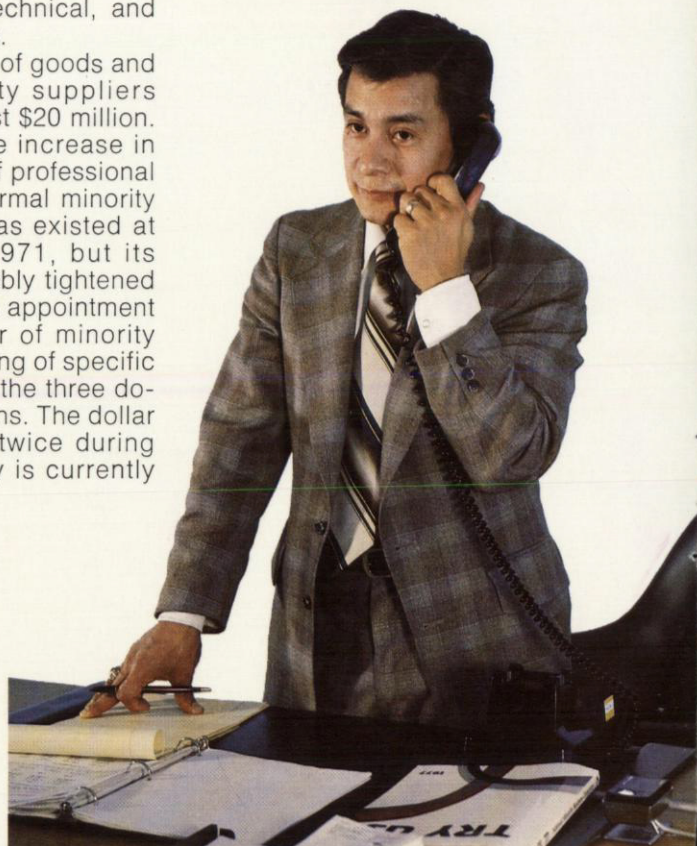
of minority employees increased from a year earlier. There was also a decided improvement in the percentages of minorities and women employed in the higher-level managerial, professional, technical, and skilled-crafts categories.

Corporate purchases of goods and services from minority suppliers nearly doubled to almost \$20 million. There was a noticeable increase in the number and value of professional services rendered. A formal minority purchasing program has existed at Borden since June 1971, but its structure was considerably tightened during the year with the appointment of a corporate director of minority purchasing and the setting of specific dollar goals for each of the three domestic operating divisions. The dollar goals were increased twice during the year. The company is currently

being served by more than 300 minority suppliers in 29 states.

A pilot minority program, developed in 1976, was expanded during the year to include additional products and cities. Eight black marketing students from Central State, Wilberforce, and Xavier Universities in Ohio have been assigned to Borden food brokers in six cities to help assemble market data on Wyler's drink mixes, Cracker Jack candied popcorn, Borden breakfast drink, and Cremora non-dairy creamer. The students visit food stores, checking stocks, setting up displays, tabulating purchases, and interviewing customers. They receive college credits as well as salaries and mileage allowances.

The Borden Foundation, Inc., which serves as the principal conduit for charitable contributions by the company, provided grants to United Way campaigns and to various health-care, youth, community development, cultural arts, and educational organizations. Educational support included unrestricted grants to the Independent College Funds of America and the United Negro College Fund. Assistance was provided to minority students through a first-time grant to National Medical Fellowships, Inc. (for American Indians) and continued support to Spelman College, A Better Chance (ABC), and the Universidad Boricua. Scholarship assistance was given to disadvantaged minority students in the fields of bio-nutrition, engineering, accounting and journalism.



Borden purchased almost \$20 million worth of goods and services from more than 300 minority suppliers in 29 states. George S. Hernandez, right, is president of Vintex Corp., Galveston, Tex., a minority-owned supplier of phenol to Borden Chemical plants in Diboll, Tex., and LaGrande, Ore.

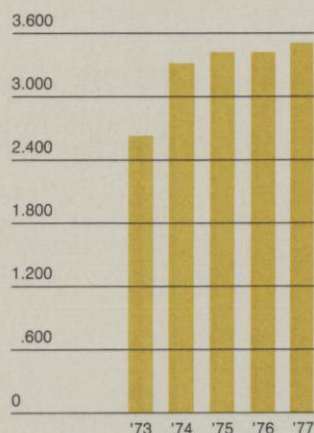
1977 Financial Review



Financial Review and Management Analysis

Sales

in billions of dollars



Income Per Share*

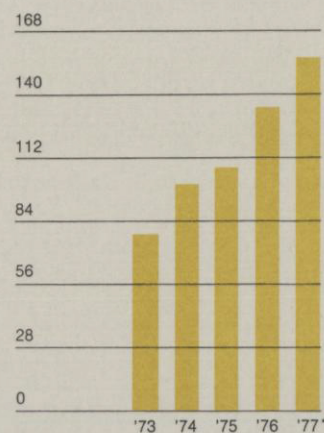
in dollars



*Primary

Capital Expenditures

in millions of dollars



*See note 1 to financial statements concerning capital leases

Sales and Earnings

Net income increased 12.5% to \$126,870,000 from the previous high of \$112,807,000 in 1976. Primary earnings per share increased 11.8% to \$4.07 from the previous high of \$3.64. Fully diluted earnings per share, reflecting two outstanding convertible Eurodollar debenture issues, were \$3.89 compared with \$3.48 in 1976. Net income in 1976 was 21.4% over the record level of 1975 and primary earnings per share were 20.9% over 1975.

Sales increased to \$3,481,278,000 in 1977 representing an increase of 3.0% over the 1976 record of \$3,381,075,000. Sales in 1975 were \$3,367,243,000.

Interest expense increased in 1977 as compared to 1976 as a result of additional high rate, short- and long-term international debt outstanding during the year.

Pretax income amounted to \$220,170,000 up 7.9% from \$204,107,000 in 1976. Federal, foreign and state and local income taxes totaled \$93,300,000 compared with \$91,300,000 in 1976. The investment tax credit was \$10,800,000 in 1977 against \$8,150,000 in the previous year. Pretax income increased 19.7% in 1976 as compared to 1975. Income taxes in 1975 were \$77,600,000 and the investment tax credit aggregated \$5,500,000.

Net Working Capital

The company maintains working capital which is deemed adequate to assure its liquidity. Efforts are directed toward maximizing internal cash generations and maintaining the lowest reasonable debt levels. There are programs for close monitoring of the receivables position, maintenance

of stringent inventory controls, and the application of cash management techniques. Such programs have enabled the company to minimize its short-term borrowings and to maintain a strong liquidity position.

Capital Expenditures

Capital expenditures for new and improved facilities amounted to \$156,179,000 as compared to \$134,153,000 in 1976 (See Note 1 to financial statements concerning capital leases). Depreciation, depletion and amortization aggregated \$63,432,000 against \$56,626,000 in the previous year.

Dividends

The Company completed 79 years of uninterrupted dividends, dating back to its incorporation in 1899, with the payment in December of the 271st consecutive dividend on Common Stock.

Cash dividends of \$47,165,000 were paid on the Company's capital stock in 1977, compared with \$41,648,000 in 1976. Dividends on Common Stock were \$47,029,000 at \$1.52 per share and on Preferred Stock—Series B, \$136,000 at \$1.32 per share. The Preferred Stock—Series B is convertible at any time into Common Stock at the rate of 1.1 shares of Common for each share of Preferred.

General Business Activities and Services

Competition is intense for each of the operating divisions which must compete with both national and local manufacturers. Since its products are sold to thousands of

customers from all walks of life, Borden's advertising and promotional activities are extensive and embrace all avenues of business communications.

Borden purchases raw materials and supplies from a broad range of sources. Natural gas, fuel oil and electricity are the Company's principal energy sources. The challenge of meeting these energy needs is met by an Energy Task Force (discussed elsewhere in this annual report), which establishes and enforces Company energy conservation policies.

Borden is continually developing and marketing new food and chemical products. Research and development activities are carried on at the divisional level and are integrated with quality controls for existing product lines. Research and development expenditures were \$16,300,000 in 1977 and \$14,800,000 in 1976.

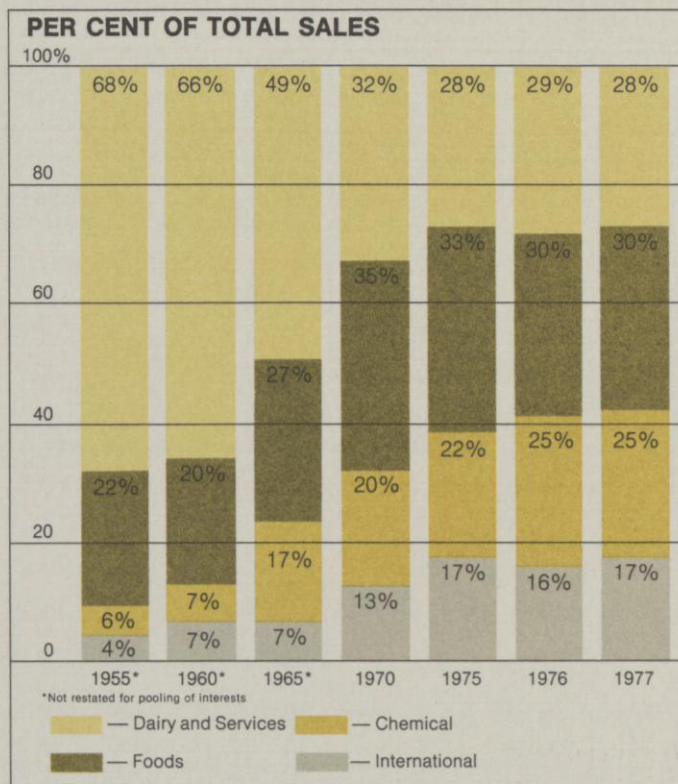
Borden is actively engaged in complying with environmental protection laws, as well as the various federal and state statutes and regulations relating to the production, processing, distribution, and labeling of its many products. In this connection Borden incurred approximately \$10,700,000 worth of capital expenditures during 1977. It is estimated that the Company will spend approximately \$18,800,000 for environmental control facilities during 1978.

Approximately one-half of Borden's domestic employees are covered by collective bargaining agreements, which are generally effective for periods of from one to three years. During 1977, the Company employed approximately 37,800 persons, about 28,900 of whom are located in the United States.

Trends by Business Area

A breakdown of the Company's sales, operating profit and other information between the foods and chemical industry segments is presented in Note 8 to the financial statements. Business within these industry segments is conducted through four major operating divisions. A five year summary of sales and operating income by the four operating divisions is presented on the following page. An analysis of results achieved in both industry segments, in terms of the divisions which achieved them, for the three most recent years, is as follows:

The Foods Division's sales declined 0.3% in 1977 as compared to 1976 while operating income decreased 5.1%. Operating income as a percent of sales was 5.1% in 1977 compared with 5.4% in 1976. Unit sales overall were about level. Dollar sales increased for most product categories, but the gains were more than offset by the loss of sales resulting from the disposition of the Comstock/Greenwood operations and lower dollar volume in soft drink mixes, one of the division's more important products. The effect on operating income of an



industry wide abundance of cheese, severe competitive market conditions in soft drink mixes and a sharp run-up in coffee and cocoa prices combined to overshadow the favorable results experienced in the division's sugar and other operations. Sugar operations marked a continuation of the improvements of 1976, which reflected a swing from loss to profit, and were a substantial factor in the division's improved operating income compared with 1975, both as a percent of sales and in the absolute. The decline in 1976 sales from 1975 was the result of generally lower sales prices, particularly for sugar and sugar based products.

The Dairy and Services Division's sales in 1977 increased 1.2% over 1976 and operating income increased 0.9%. The gain in sales reflected generally higher selling prices on moderately lower overall volume. The effect on operating income of lower volumes of basic whole milk and ice cream was more than offset by increases achieved in the division's specialty operations such as bottled water, bottled soft drinks, and milk-based products for the industrial trade, in addition to increases in yogurt, fruit drinks and ice cream novelties. In comparing 1976 with 1975, the division achieved a slight increase in unit sales of milk products and a substantial increase in unit sales of its specialty operations. Unit margins were adversely affected in 1976 on milk and ice cream products because of escalating costs of raw milk and butterfat

which were not completely recovered through higher selling prices. Overall, however, operating income as a percent of sales was higher than 1975 which was adversely affected by costs associated with the withdrawal from the milk business in Chicago.

In the Chemical Division, sales in 1977 were 5.1% higher than in 1976 and operating income increased 9.4%. Overall, these results were achieved through substantially higher volumes, which more than offset lower prices and higher costs in some major product groups, and the benefit of new facilities that came on stream during the year. Volume increases were achieved in thermosetting and thermoplastic resins: glues for high-quality furniture, resins for abrasives, foundry resins, Insulspray (a foamed-in-place insulating material), PVC resins, Resinite PVC packaging films and coated fabrics. Demand for most of these products was aided by substantial increases in housing starts. Coated fabrics, however, was adversely affected by a softening in the automotive market for vinyl seats and roofs. Shipments of fertilizer, spurred by lower selling prices, rose to the highest level on record. Chemical consumer products, the Elmer's line of glues, Krylon spray paints, and Sterling office supplies showed increased volumes. The Alex Colman line of women's sportswear and dresses declined in volume as the result of a consumer preference shift from synthetic fiber toward natural fiber clothing. In comparing 1976 with 1975, sales and operating income increases were

achieved in almost all of the division's product lines except fertilizer where shipments were at an all time high and resulted in increased dollar sales, but a drop in selling prices resulted in lower operating income.

The International Division's sales increased 8.9% in 1977 as compared with 1976 and operating income increased 15.0%. Both the foods and chemical segments of this division contributed to the increase in sales and operating income. In the foods segment, significant increases in sales and operating income were achieved by the European whole milk powder operations and bakery operations, and by the Latin American pasta operations. In the chemical segment, sales and operating income increases of the European and Latin American operations more than offset the declines in petrochemical and fertilizer exports. Exports were adversely affected by lower prices and increased domestic demand. In comparing 1976 with 1975, overall sales of the division declined 8.1% while operating income increased 3.4%. Sales of the foods segment declined as a result of disposition of certain operations and the impact of currency fluctuations. Operating income was higher than 1975 which was adversely affected by costs associated with the disposal of the operations. The chemical segment's overall sales increased in spite of the substantial decrease in export fertilizer sales which resulted from lower prices and volume. Export fertilizer was the major factor in the overall decrease in 1976 chemical segment operating income.

Five Year Comparison of Division Sales and Operating Income (Dollars In Thousands)*

	1977		1976		1975	1974	1973
Division Sales							
Foods	\$1,027,823	30%	\$1,030,924	30%	\$1,096,301	\$1,109,707	\$ 806,377
Dairy and Services	982,781	28	970,657	29	946,748	868,338	733,475
Chemical	876,189	25	833,563	25	730,163	701,476	559,973
International (including exports)	594,485	17	545,931	16	594,031	584,981	454,169
Total	<u>\$3,481,278</u>	<u>100%</u>	<u>\$3,381,075</u>	<u>100%</u>	<u>\$3,367,243</u>	<u>\$3,264,502</u>	<u>\$2,553,994</u>
Division Operating Income							
Foods	\$ 52,578	19%	\$ 55,404	21%	\$ 31,717	\$ 58,506	\$ 50,073
Dairy and Services	44,382	16	43,965	17	36,199	33,953	31,230
Chemical	118,222	43	108,086	42	99,067	80,266	52,899
International (including exports)	60,990	22	53,057	20	51,307	39,903	34,807
Total	<u>276,172</u>	<u>100%</u>	<u>260,512</u>	<u>100%</u>	<u>218,290</u>	<u>212,628</u>	<u>169,009</u>
Other income and expenses not allocable to divisions and federal income taxes	(149,302)		(147,705)		(125,406)	(128,783)	(96,047)
NET INCOME	<u>\$ 126,870</u>		<u>\$ 112,807</u>		<u>\$ 92,884</u>	<u>\$ 83,845</u>	<u>\$ 72,962</u>

*Prior year data has been restated to reflect certain 1977 shifts of organizational responsibility.

Five-Year Financial Summary

BORDEN, INC.

(All dollar and share figures in thousands — except market price and per share statistics)

Summary of Earnings	1977	1976	1975	1974	1973
Net sales	\$3,481,278	\$3,381,075	\$3,367,243	\$3,264,502	\$2,553,994
Cost of goods sold	2,748,916	2,675,866	2,732,007	2,677,179	2,073,720
Interest expense	33,616	29,902	26,364	25,636	17,724
Income taxes	93,300	91,300	77,600	75,000	62,600
Net income	126,870	112,807	92,884	83,845	72,962
Net income per common share and equivalents:					
Primary	\$4.07	\$3.64	\$3.01	\$2.72	\$2.37
Fully diluted	3.89	3.48	2.88	2.61	2.28
Dividend:					
Common share	\$1.52	\$1.35	\$1.30	\$1.25	\$1.20
Preferred series A share			.65	.625	.60
Preferred series B share	1.32	1.32	1.32	1.32	1.32
Average number of common shares and equivalents assumed outstanding during the year for calculation of:					
Primary earnings per share	31,190	30,998	30,886	30,827	30,810
Fully diluted earnings per share	33,127	32,991	32,882	32,823	32,806
Percent of net income to sales	3.6%	3.3%	2.8%	2.6%	2.9%
Financial Statistics					
Capital expenditures	\$ 156,179*	\$ 134,153	\$ 104,079	\$ 100,243	\$ 76,488
Inventories	464,117	434,184	407,065	489,403	330,880
Property, plant and equipment	734,804	644,238	583,481	566,610	519,006
Depreciation, depletion, and amortization	63,432	56,626	51,594	50,237	46,099
Current assets	958,646	963,640	864,747	883,285	715,673
Current liabilities	434,431	441,300	391,255	432,987	369,291
Working capital	524,215	522,340	473,492	450,298	346,382
Current ratio	2.2:1	2.2:1	2.2:1	2.0:1	1.9:1
Long-term debt	353,523*	348,083	335,382	340,800	235,297
Debt-to-equity percent	34%	37%	39%	42%	31%
Shareholders' equity	1,024,989	938,211	863,560	810,431	764,817
Liquidating value of preferred stock	(2,079)	(4,716)	(7,173)	(10,817)	(17,525)
Common shareholders' equity	1,022,910	933,495	856,387	799,614	747,292
Equity per common share at year end	\$32.89	\$30.35	\$28.05	\$26.35	\$24.87
Shareholders' Data					
Outstanding shares at year end:					
Common	31,105	30,760	30,526	30,342	30,045
Preferred series A				158	315
Preferred series B	72	163	248	265	388
Market price of common stock:					
At year end	\$31	\$34	\$27	\$20	\$21
Range during year	29-36	26-34	21-29	15-25	19-32
Number of common shareholders	63,584	65,359	67,167	67,243	67,552
Employees' Data					
Payroll	\$ 468,800	\$ 459,500	\$ 436,900	\$ 403,800	\$ 374,600
Average number of employees	37,800	40,400	42,100	46,700	46,500

* See Note 1 to financial statements concerning capital leases.

Consolidated Statements of Income

BORDEN, INC.

		Year Ended December 31	
		1977	1976
Revenue	Net sales	<u>\$3,481,278,395</u>	<u>\$3,381,074,656</u>
Costs and Expenses	Cost of goods sold	2,748,916,260	2,675,865,819
	Selling, general and administrative expenses	491,374,992	484,812,165
	Equity in affiliates, interest income, royalties, net	(12,799,170)	(13,612,746)
	Interest expense	33,616,270	29,902,188
	Income taxes	<u>93,300,000</u>	<u>91,300,000</u>
		<u>3,354,408,352</u>	<u>3,268,267,426</u>
Earnings	Net income	<u>\$ 126,870,043</u>	<u>\$ 112,807,230</u>
Share Data	Net income per share:		
	Primary	\$ 4.07	\$ 3.64
	Fully diluted	3.89	3.48
	Cash dividends per common share	1.52	1.35
	Average number of common shares and equivalents assumed outstanding during the year	31,190,088	30,997,842

See accompanying Notes To Consolidated Financial Statements

Consolidated Statements of Changes in Financial Position

BORDEN, INC.

		Year Ended December 31	
		1977	1976
Financial Resources Provided	Operations:		
	Net income	\$126,870,043	\$112,807,230
	Depreciation, depletion and amortization	63,431,688	56,625,773
	Deferred income taxes	9,700,000	9,400,000
	Amortization and write-off of intangible assets and other non-working capital items, net	5,429,744	3,550,996
	Total provided from operations	205,431,475	182,383,999
	Long-term debt financing	33,620,493	24,692,985
	Property disposals	5,354,743	26,579,811
	Other changes in non-current assets and liabilities, net	3,507,201	8,023,487
		<u>247,913,912</u>	<u>241,680,282</u>
Financial Resources Applied	Capital expenditures	156,178,902	134,153,098
	Cash dividends	47,164,632	41,647,818
	Reduction in long-term debt	32,575,731	13,321,143
	Increase (decrease) in long-term investments	5,688,846	(11,176,744)
	Purchases of businesses, net of working capital acquired	4,431,083	14,887,372
		<u>246,039,194</u>	<u>192,832,687</u>
Increase in Working Capital		<u>\$ 1,874,718</u>	<u>\$ 48,847,595</u>
Working Capital	Details of increase (decrease) in working capital:		
	Cash (including time and certificates of deposit)	\$ (72,924,482)	\$ 59,921,237
	Accounts receivable	37,997,386	11,851,712
	Inventories	29,933,341	27,119,009
	Current maturities of long-term debt	(5,565,611)	(5,118,869)
	Accounts and drafts payable	(12,202,615)	(3,369,348)
	Taxes, payrolls and other liabilities	24,636,699	(41,556,146)
	Increase in Working Capital	<u>\$ 1,874,718</u>	<u>\$ 48,847,595</u>

See accompanying Notes To Consolidated Financial Statements

Consolidated Balance Sheets

BORDEN, INC.

		December 31	
ASSETS		1977	1976
Current Assets	Cash (including time and certificates of deposit of \$73,321,000 and \$127,986,000, respectively)	\$ 135,242,874	\$ 208,167,356
	Accounts receivable (less allowance for doubtful accounts—\$10,532,000 and \$10,858,000, respectively)	359,285,412	321,288,026
	Inventories:		
	Finished and in process goods	308,329,067	300,840,918
	Raw materials and supplies	155,788,292	133,343,100
		<u>958,645,645</u>	<u>963,639,400</u>
Investments and Other Assets	Investments in and advances to affiliated companies (at cost plus equity in undistributed income)	33,655,917	26,019,911
	Miscellaneous investments and receivables (at cost or less)	14,658,103	13,732,649
	Deferred charges	21,107,292	19,766,985
		<u>69,421,312</u>	<u>59,519,545</u>
Property and Equipment	Land	35,427,762	36,074,134
	Buildings	277,150,550	263,478,918
	Machinery and equipment	918,944,737	795,159,002
		<u>1,231,523,049</u>	<u>1,094,712,054</u>
	Less accumulated depreciation	<u>(496,718,889)</u>	<u>(450,474,411)</u>
		<u>734,804,160</u>	<u>644,237,643</u>
Intangibles	Intangibles resulting from business acquisitions	<u>138,753,951</u>	<u>141,082,821</u>
		<u>\$1,901,625,068</u>	<u>\$1,808,479,409</u>

See accompanying Notes To Consolidated Financial Statements

LIABILITIES AND SHAREHOLDERS' EQUITY		December 31	
		1977	1976
Current Liabilities	Current maturities of long-term debt	\$ 16,438,369	\$ 10,872,758
	Accounts and drafts payable	260,843,760	248,641,145
	Taxes, payrolls and other liabilities	157,148,971	181,785,670
		<u>434,431,100</u>	<u>441,299,573</u>
Other	Long-term debt	353,523,242	348,083,480
	Deferred income taxes	84,358,072	74,658,072
	Other long-term liabilities	2,463,076	3,145,818
	Minority interests in consolidated subsidiaries	1,861,034	3,081,572
		<u>442,205,424</u>	<u>428,968,942</u>
Shareholders' Equity	Capital Stock:		
	Preferred stock — no par value		
	Authorized 10,000,000 shares		
	Issued series B convertible — 71,979 shares and 163,306 shares, respectively (involuntary liquidating value of \$2,078,754 or \$28.88 per share at December 31, 1977)	296,913	673,637
	Common stock — \$3.75 par value		
	Authorized 60,000,000 shares		
	Issued 31,105,176 shares and 30,760,053 shares, respectively	116,644,410	115,350,199
	Paid-in capital	193,108,206	186,957,873
	Retained earnings	714,939,015	635,233,604
		<u>1,024,988,544</u>	<u>938,215,313</u>
	Less common stock in treasury (at cost) — 156 shares		(4,419)
		<u>1,024,988,544</u>	<u>938,210,894</u>
		<u>\$1,901,625,068</u>	<u>\$1,808,479,409</u>

Consolidated Statements of Shareholders' Equity

BORDEN, INC.

For the Two Years Ended December 31, 1977

	CAPITAL STOCK ISSUED		Paid-In Capital	Retained Earnings	Treasury Stock
	Preferred Series B	Common			
Balance, December 31, 1975	\$1,024,510	\$114,476,940	\$184,008,408	\$564,074,192	\$ (23,967)
Net income				112,807,230	
Cash dividends:					
Common stock				(41,391,491)	
Preferred series B				(256,327)	
Preferred series B stock converted	(350,873)	350,831			
Common stock issued for exercised stock options		470,648	2,567,402		
Treasury stock issued under Management Incentive Plan			(1,109)		19,548
5% Convertible debentures converted		51,780	383,172		
Balance, December 31, 1976	<u>673,637</u>	<u>115,350,199</u>	<u>186,957,873</u>	<u>635,233,604</u>	<u>(4,419)</u>
Net income				126,870,043	
Cash dividends:					
Common stock				(47,028,988)	
Preferred series B				(135,644)	
Preferred series B stock converted	(376,724)	376,669			
Common stock issued for exercised stock options		440,171	2,697,903		
Common stock issued under Management Incentive Plan		1,732	10,620		
Treasury stock issued under Management Incentive Plan			(257)		4,419
5% Convertible debentures converted		369,739	2,736,067		
6¾ % Convertible debentures converted		105,900	706,000		
Balance, December 31, 1977	<u>\$ 296,913</u>	<u>\$116,644,410</u>	<u>\$193,108,206</u>	<u>\$714,939,015</u>	<u>\$ —</u>

See accompanying Notes To Consolidated Financial Statements

Notes to Consolidated Financial Statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies followed by the Company, as summarized below, are in conformity with generally accepted accounting principles.

Principles of Consolidation — The consolidated financial statements include the accounts of Borden, Inc. and all subsidiaries, after elimination of material intercompany accounts and transactions. The Company's proportionate share of the net earnings of unconsolidated 20% to 50% owned companies is included in income. The carrying value of these companies approximates Borden's interest in their underlying net assets. Investments of less than 20% ownership are carried at cost.

Intangibles — The excess cost of investments over net tangible assets of businesses acquired are carried as Intangibles in the Consolidated Balance Sheets. It is the Company's policy to carry intangibles arising prior to November, 1970 at cost until such time as there may be evidence of diminution in value or the term of existence of such value becomes limited. Intangibles arising after October, 1970 are being amortized over a forty-year period.

Inventories — Inventories are stated at the lower of cost or market. Cost is determined generally using the average cost and first-in, first-out methods.

Property and Equipment — Land, buildings, and machinery and equipment are carried at cost.

Depreciation is recorded on the straight-line basis by charges to costs and expenses at rates based on the estimated useful lives of the properties (average rates for buildings — 3%; machinery and equipment — 7%).

Major renewals and betterments are capitalized. Maintenance, repairs, and minor renewals are expensed as incurred. When properties are retired or otherwise disposed of, the related cost and accumulated depreciation are removed from the accounts. Gains or losses from normal retirements and disposals are credited or charged to accumulated depreciation, while gains and losses from other retirements and disposals are credited or charged to income.

During the year, the Company leased certain property and equipment (primarily transportation equipment) under operating and capital leases as defined by the Financial Accounting Standards Board in their Statement No. 13, which became effective for leases entered into on or after January 1, 1977. Property and equipment covered by 1977 agreements, meeting the definition of capital leases, were capitalized and accounted for accordingly (See Note 3), with the corresponding obligations carried as a liability.

All other lease agreements were classified and accounted for as operating leases with payments expensed as incurred.

Income Taxes — The provision for income taxes includes federal, foreign, and state and local taxes currently payable and deferred taxes arising from timing differences between income for financial statements and income tax purposes. These timing differences principally result from additional deductions available through the use of accelerated methods of depreciation for tax purposes.

Investment tax credits are applied as reductions of income taxes in the year earned.

United States income taxes have not been provided on undistributed earnings of foreign subsidiaries, or on the earnings of a Domestic International Sales Corporation (DISC) that are eligible for tax deferral, because the Company presently plans to reinvest such earnings indefinitely.

Pension Plans — Substantially all of the Company's domestic employees are covered under one of the Company's pension plans or one of the union-sponsored plans to which the Company contributes. Pension expense for the Company's plans comprises current service costs and amortization of prior service costs, generally over a thirty year period. It is the Company's policy to fund pension costs accrued for qualified plans.

Development and Promotion Expenses — Research and development expenditures are expensed as incurred as are advertising and promotion expenditures.

Earnings Per Share — Primary earnings per share are computed based on the weighted average number of shares of Common Stock and Equivalents (Convertible Preferred Stock and Stock Options) assumed outstanding during the year of computation.

Fully diluted earnings per share are computed based on the weighted average number of shares of Common Stock and Equivalents assumed outstanding during the year, as if the Convertible Debentures had been converted at the beginning of the period and after giving effect to the elimination of interest expense, less income tax effect, applicable to the Convertible Debentures.

2. FOREIGN AFFILIATES

After translation into United States dollars, the Company's proportionate share of net assets of foreign affiliates included in the consolidated financial statements was \$202,000,000 at December 31, 1977 compared to \$179,000,000 at December 31, 1976.

Realized and unrealized net exchange losses aggregating \$4,200,000 and \$1,700,000, were charged against net income in 1977 and 1976, respectively.

3. LEASE CAPITALIZATION

The Company accounts for leases as described in Note 1. If the lease accounting prescribed for 1977 by Financial Accounting Standards Board Statement No. 13 had been applied on a retroactive basis, balance sheets at December 31, 1977 and 1976 would have been adjusted approximately as follows (dollars in thousands):

	1977	1976
	Increase (Decrease)	
Property and equipment	\$126,800	\$136,800
Accumulated depreciation	77,200	70,000
Current maturities of long-term debt	13,600	15,700
Long-term debt	40,900	56,300
Deferred taxes	(2,350)	(2,500)
Retained earnings	(2,550)	(2,700)

The effect on net income would have been immaterial for 1977 and each year prior thereto.

At December 31, 1977, approximately \$18,800,000 of machinery and equipment and \$1,800,000 of accumulated depreciation was included in the balance sheet as the result of 1977 capital leases.

In January, 1978 the Company paid approximately \$47,000,000 of the December 31, 1977 amount described above as debt and \$17,000,000 of the capitalized lease obligation as set forth in Note 4. As a result, approximately 45% of the minimum rentals shown in Note 4 have been eliminated. Funds were provided through bank term loans, bearing floating money market interest rates, and maturing in installments from 1980 through 1988.

4. LONG-TERM DEBT, LEASE OBLIGATIONS AND COMMITMENTS

Long-term debt outstanding at December 31, 1977 and 1976 is as follows (dollars in thousands):

	1977		1976	
	Long-term	Due Within One Year	Long-term	Due Within One Year
Sinking Fund Debentures:				
2 $\frac{7}{8}$ %, due 1981	\$ 27,500		\$ 28,750	
4 $\frac{7}{8}$ %, due 1991	26,000	\$ 2,000	28,000	\$ 2,000
5 $\frac{3}{4}$ %, due 1997	71,250	3,750	75,000	
8 $\frac{1}{2}$ %, due 2004	100,000		100,000	
Debentures repurchased	(8,402)	(4,428)	(3,807)	(35)
Promissory Notes:				
5 $\frac{3}{8}$ %, due 1981	2,100	800	2,900	800
8 $\frac{1}{4}$ %, due 1985 in Swiss Francs	14,871		12,234	
7 $\frac{5}{8}$ %, due 1986 in Swiss Francs	9,914		8,156	
Other borrowings (at an average rate of 11 $\frac{3}{4}$ %)	39,954	11,688	37,285	8,108
Convertible Debentures:				
6 $\frac{3}{4}$ %, due 1991	29,188		30,000	
5%, due 1992	26,459		29,565	
Capitalized Leases (at an average rate of 8%) (See Note 3)	14,689	2,628		
	<u>\$353,523</u>	<u>\$16,438</u>	<u>\$348,083</u>	<u>\$10,873</u>

The 6 $\frac{3}{4}$ % Convertible Debentures (Eurodollar obligations) are convertible into Common Shares of Borden, Inc. at \$28.75 a share and are redeemable at the Company's option except in certain defined circumstances. The redemption price will be equal to the face amount plus annually decreasing premiums to 1986.

The 5% Convertible Debentures (Eurodollar obligations) are convertible into Common Shares of Borden, Inc. at \$31.50 a share and are redeemable at the Company's option except in certain defined circumstances. The redemption price will be equal to the face amount plus annually decreasing premiums to 1987.

Aggregate maturities of long-term debt and minimum annual rentals under agreements classified and accounted for as operating leases at December 31, 1977 are as follows (dollars in thousands):

	Long-Term Debt**	Minimum Rentals on Operating Leases (See Note 3)
1978	\$16,438	\$29,159
1979	22,029	25,274
1980	14,586	20,594
1981	39,086	16,489
1982	13,409	13,364
1983 and beyond*	264,413	23,424

*Figures represent combined totals for all years.

**Net of debentures repurchased.

The Company has unused lines of credit for short-term financing needs, aggregating approximately \$148,000,000

at December 31, 1977, with interest rates approximating the prime rate in effect at date of use.

The Company was guarantor of loans aggregating approximately \$20,000,000 at December 31, 1977.

Pursuant to the arrangements covering the above lease agreements, lines of credit, and certain loan guarantees, the Company has agreed to maintain minimum average cash balances aggregating approximately \$18,000,000 with various commercial banks. The Company attributes no cost to such arrangements as these amounts do not exceed balances which would be required for normal operating needs.

5. INCOME TAXES

Comparative analyses of the provisions for income taxes follows:

	1977	1976
Currently payable		
United States	\$72,600,000	\$70,100,000
Investment tax credit	(10,800,000)	(8,150,000)
Foreign	10,200,000	9,000,000
State and local	11,600,000	10,950,000
	<u>83,600,000</u>	<u>81,900,000</u>
Deferred		
Domestic	8,500,000	8,000,000
Foreign	1,200,000	1,400,000
	<u>9,700,000</u>	<u>9,400,000</u>
	<u>\$93,300,000</u>	<u>\$91,300,000</u>

Total tax expense represents effective tax rates of 42.4% and 44.7% for 1977 and 1976, respectively, compared to the United States statutory tax rate of 48%. The lower effective tax rates are attributable to the investment tax credit plus other offsetting items such as the differences between foreign and United States rates, costs of state and local taxes and qualified export benefits.

The cumulative amount of foreign and DISC earnings on which United States taxes have not been provided aggregated approximately \$50,000,000 at December 31, 1977, exclusive of those amounts which if remitted would result in no tax by utilization of available foreign tax credits.

6. PENSION PLANS

The charges to operations under the Company's pension plans were \$14,600,000 in 1977 and \$14,500,000 in 1976. The actuarially computed value of vested benefits under these plans as of January 1, 1977 exceeded the total pension fund and balance sheet accruals by approximately \$70,500,000.

Operations were charged approximately \$5,300,000 in 1977 and \$4,700,000 in 1976 primarily for payments to pension trusts on behalf of certain employees covered by collective bargaining units who have not elected to participate in the Company's plans and of retirement allowances paid to former employees under arrangements in effect prior to the inception of the present plans.

7. SHAREHOLDERS' EQUITY

Each of the 71,979 shares of Preferred Stock — Series B, bears an annual cumulative dividend of \$1.32, is convertible into 1.1 common shares, and is presently redeemable at the Company's option at \$41. The redemption price will be reduced annually by \$1 per share until July 29, 1979.

As of January 1, 1977, 532,784 shares of Common Stock of the Company were reserved for unexercised stock options at prices ranging from \$19.44 to \$31.00 per share. During 1977, options for 132,384 shares were granted at \$32.75 per share and options for 10,400 shares expired or were cancelled. Options for 117,379 shares were exercised at prices ranging from \$19.44 to \$31.00 per share, leaving 537,389 shares reserved for unexercised options at prices ranging from \$19.44 per share to \$32.75 per share as of December 31, 1977. In addition, there were 103,066 shares available for future grants at that date.

At December 31, 1977, 79,177 shares were reserved for conversion of Preferred Stock — Series B. In addition, 1,855,214 shares were reserved for issuance upon conversion of the 6¾% and 5% Convertible Debentures discussed in Note 4 and 72,642 shares were reserved pursuant to the Management Incentive Plan.

8. OPERATIONS BY INDUSTRY SEGMENT

Borden, Inc. is primarily engaged in the purchase, manufacture, processing, and distribution of a broad range of food and chemical products, both domestically and in foreign countries. Corporate departments provide certain centralized services for the corporation and all operating units. The Company's general offices are located in Columbus, Ohio and its Executive Offices in New York City. Production facilities are located throughout the United States and in many foreign countries. The Company considers that its operating properties are generally well maintained, in satisfactory condition, and effectively utilized. The two major industry segments of the Company are foods and chemical.

The Foods segment encompasses the following: the Foods Division, including in its product lines — cheese, sugar, non-dairy creamer, reconstituted lemon and lime juice, dehydrated potatoes, instant coffee, sweetened condensed milk, snack foods and cakes, powdered soft drinks, jams and jellies, tomato juice, and sea food; the Dairy and Services Division, marketing a full line of dairy and specialty products including homogenized milk, buttermilk, chocolate drink, ice creams and milks, sherbets, yogurt, cottage cheese, frozen novelties, dips, egg nog, sour cream, low-fat dairy products, milk-based products for the industrial trade, fruit drinks, bottled water and bottled soft drinks; and the International Division's food products processed in domestic plants but exported outside

the United States, and food and dairy products processed in overseas plants. As of December 31, 1977, the Foods Division operated 33 manufacturing and processing facilities; the Dairy and Services Division operated 70 manufacturing and processing facilities, and the International Division operated 48 food and dairy manufacturing and processing facilities.

Included within the Chemical segment are the Chemical Division and chemical related products of the International Division produced both domestically and overseas. This segment is a major producer of agricultural fertilizers and chemicals, animal feed supplements and basic petrochemicals and thermoplastics including polyvinyl acetate, PVC latex and resins, formaldehyde, methanol, ammonia, urea and acetic acid. It also produces synthetic adhesives for plywood products, transparent wrapping film, printing inks, vinyl wall coverings, glue; tape, spray paint, plastic office and housewares, and clothing. As of December 31, 1977, the Chemical Division operated 67 manufacturing and processing facilities and the International Division operated 47 chemical manufacturing and processing facilities.

Domestic products for the Foods segment are marketed directly, or through food brokers and distributors, to wholesalers, retail stores, food processors, institutions, and governmental agencies. The Chemical segment products are sold throughout the United States to industrial users and, in the case of consumer products, to distributors, wholesalers, jobbers, and dealers. To the extent practicable, international distribution techniques parallel those used in the United States. However, raw materials, production considerations, pricing competition, governmental policy toward industry and foreign investment, and other factors vary substantially from country to country for both industry segments.

Segment operating profit as shown below is total revenue less operating expenses. In computing segment operating profit none of the following items have been deducted from revenues: general corporate expenses, interest expense, and federal, state and local income taxes. Division operating income appearing on page 28 differs from segment operating profit due to the responsibility which the divisions assume for state and local income taxes. Sales between industry segments were not material and are not separately set forth. Minority interest in earnings of certain subsidiaries and the Company's equity in earnings of unconsolidated 20% to 50% owned companies were immaterial and have been included in segment operating profit.

Identifiable assets by segment are those assets that are used in the segments' operations. Corporate assets are principally cash and cash items.

Listed below is information about the Company's operations by industry segment (dollars in thousands):

	1977	1976
Sales to Unaffiliated Customers:		
Foods	\$2,325,541	\$2,284,272
Chemical	1,155,737	1,096,803
	<u>\$3,481,278</u>	<u>\$3,381,075</u>
Segment Operating Profit:		
Foods	\$ 135,437	\$ 131,358
Chemical	153,581	140,328
	<u>289,018</u>	<u>271,686</u>
General Corporate Expenses	(35,232)	(37,677)
Interest Expense	(33,616)	(29,902)
Earnings Before Income Taxes	<u>\$ 220,170</u>	<u>\$ 204,107</u>
Identifiable Assets at Year End:		
Foods	\$ 967,781	\$ 891,266
Chemical	841,957	747,035
	<u>1,809,738</u>	<u>1,638,301</u>
Corporate Assets	91,887	170,178
	<u>\$1,901,625</u>	<u>\$1,808,479</u>
Depreciation Expense:		
Foods	\$ 27,268	\$ 25,233
Chemical	34,760	29,963
Capital Expenditures:		
Foods	\$ 66,181*	\$ 56,293
Chemical	89,283*	77,312
Foreign Operations (excluding exports):		
Sales to Unaffiliated Customers	\$ 528,912	\$ 478,637
Foreign Operating Profit	49,468	37,465
Identifiable Assets at Year End	391,223	343,128

* See Note 1 to financial statements concerning capital leases.

9. SUPPLEMENTAL INCOME STATEMENT INFORMATION

Set forth below is a comparative summary of certain expense items (dollars in thousands):

	1977	1976
Maintenance and repairs	\$ 91,282	\$ 88,151
Depreciation, depletion, and amortization	63,432	56,626
Taxes other than income taxes	54,668	48,370
Advertising and promotion, including promotions of \$80,378 and \$71,120, respectively	149,330	140,105
Rents	37,278	40,702

10. EARNINGS PER SHARE

The average number of Common Shares and Equivalents entering into the calculation of primary and fully diluted earnings per share are as follows:

	1977	1976
Common Shares	30,947,110	30,667,214
Convertible Preferred Series B	111,140	212,476
Stock options and incentive compensation	131,838	118,152
Total for primary calculation	<u>31,190,088</u>	<u>30,997,842</u>
Convertible Debentures:		
6¾%	1,031,712	1,043,479
5%	905,232	949,245
Total for fully diluted calculation	<u>33,127,032</u>	<u>32,990,566</u>

11. CURRENT REPLACEMENT COSTS (UNAUDITED)

In recent years production costs have increased as a result of inflation. Generally, the Company has been able to compensate for cost increases by increasing sales prices in an amount sufficient to maintain an approximately constant gross profit percentage on sales.

Replacing items of plant and equipment with assets having equivalent productive capacity has usually required a greater capital investment than was required to purchase the assets replaced. The additional capital investment principally reflects the cumulative impact of inflation on these assets.

The Company's annual report on Form 10-K contains specific information with respect to year-end 1977 and 1976 replacement cost of inventories and productive capacity (generally buildings, and machinery and equipment) and the approximate effect which replacement cost would have had on the computation of costs of goods sold and depreciation expense for each year.

12. QUARTERLY FINANCIAL DATA (UNAUDITED)

	1977 Quarters			
	First	Second	Third	Fourth
Net Sales	\$823,478	\$915,052	\$852,590	\$890,158
Gross Profit	\$168,812	\$194,725	\$180,288	\$188,537
Net Income	\$ 26,432	\$ 37,936	\$ 33,967	\$ 28,535
Net Income Per Share of Common Stock:				
Primary	\$.85	\$ 1.22	\$ 1.09	\$.91
Fully Diluted	.81	1.16	1.04	.88
Dividends*	\$.35	\$.39	\$.39	\$.39
Market Price Range:				
High	\$ 35½	\$ 35½	\$ 36¾	\$ 32½
Low	31¼	31½	31¾	29¾

	1976 Quarters			
	First	Second	Third	Fourth
Net Sales	\$833,345	\$899,260	\$807,298	\$841,172
Gross Profit	\$162,009	\$188,966	\$170,561	\$183,673
Net Income	\$ 22,866	\$ 32,914	\$ 30,725	\$ 26,302
Net Income Per Share of Common Stock:				
Primary	\$.74	\$ 1.06	\$.99	\$.85
Fully Diluted	.71	1.01	.94	.82
Dividends*	\$.325	\$.325	\$.35	\$.35
Market Price Range:				
High	\$ 29¾	\$ 30¾	\$ 33¾	\$ 34
Low	26	26¾	29¾	30¼

*Dividends on Preferred Stock—Series B were \$.33 in each quarter during 1977 and 1976.

REPORT OF INDEPENDENT ACCOUNTANTS



153 EAST 53RD STREET, NEW YORK, NEW YORK 10022 212/371-2000

February 28, 1978

Board of Directors and Shareholders of Borden, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, shareholders' equity and changes in financial position present fairly the financial position of Borden, Inc. and its subsidiaries at December 31, 1977 and 1976, the results of their operations and the changes in financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied. Our examinations of these statements were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Waterhouse & Co.

Executive Offices

Borden, Inc.
277 Park Avenue
New York, New York 10017
Telephone No. (212) 573-4000

Annual Meeting

The Annual Meeting will be held on Wednesday, April 19, 1978, beginning at 11:00 a.m. in the Hunterdon Theatre, Church Street and Route 31, Flemington, New Jersey.

Independent Accountants

Price Waterhouse & Co.
153 East 53rd Street
New York, New York 10022

Common Stock Agencies

Transfer Agent
Citibank, N.A.
111 Wall Street
New York, New York 10015

Registrar
Bankers Trust Company
16 Wall Street
New York, New York 10015

Dividend Disbursing Agent
Citibank, N.A.
111 Wall Street
New York, New York 10015

Debenture Trustees

2 $\frac{7}{8}$ % and 4 $\frac{3}{8}$ % Sinking Fund Debentures
The Chase Manhattan Bank, N.A.
New York, New York 10017

5 $\frac{3}{4}$ % Sinking Fund Debentures
Morgan Guaranty Trust Company of New York
New York, New York 10015

8 $\frac{1}{2}$ % Sinking Fund Debentures
Bank of America, N.T.&S.A.
San Francisco, California 94120

Exchange Listings

Common Stock (Ticker Symbol-BN)
New York Stock Exchange
The Common Stock is currently listed on exchanges in Basle, Geneva, Lausanne and Zurich, Switzerland.

New York Stock Exchange
2 $\frac{7}{8}$ % Sinking Fund Debentures, due 1981
4 $\frac{3}{8}$ % Sinking Fund Debentures, due 1991
5 $\frac{3}{4}$ % Sinking Fund Debentures, due 1997
8 $\frac{1}{2}$ % Sinking Fund Debentures, due 2004

Date and State of Incorporation

April 24, 1899—New Jersey

Borden, Inc. will furnish to any shareholder, without charge, a copy of its most recent annual report on Form 10-K, as filed with the United States Securities and Exchange Commission.

Written requests should be directed to:

Borden, Inc.
Attn. Mr. R. G. Tritsch
Secretary
277 Park Avenue
New York, New York 10017



BORDEN, INC.

277 PARK AVENUE / NEW YORK, N.Y. 10017

